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People & the Planet

Volume 8 Number 3

THE GREENING OF INDUSTRY

People & the Planet on the Web

The next, millennium issue, of People & the Planet, looking forward to an Ecology of Hope, will be (for the time being, at least) the last printed issue of this publication, and mark a new phase in the work of Planet 21.

Since the Earth Summit in Rio, in 1992, Planet 21 has published 30 thematic issues connecting people and the environment. With generous sponsorship and donor support, and the collaboration of 18 associated international NGOs, we have been able to reach out to a wide readership in 150 countries.

These readers will continue to be served since, by kind arrangement with the Washington-based Worldwatch Institute, all subscribers - including those on our 'free list' - **will receive complimentary copies of the Institute's World Watch magazine.** *The first copy of this superb publication should reach our readers early in the New Year.*

At the same time we are seeking funding to develop our work, in an eco-friendly way, on the Internet. Building upon our published issues over the past eight years, we plan to reorganise our existing website and to create a new 21st century multi-media resource in the years leading up to Rio+10 in 2002.

This will provide an Internet gateway to 12 key aspects of sustainable development, with a central focus on population, consumption and the environment. Each of these sub-sites will draw upon the best of People & the Planet, with introductory summaries, new features and updated reports. Each will include links to sister sites operated by our network of partner organisations.

If funding permits, each of these topics will be introduced by an accompanying video, which can be viewed, downloaded onto the computer or obtained on an easily accessible disk or tape by Internet or mail order.

Educational versions of these videos, with accompanying written materials will, we hope, also be made available to schools and colleges.

All this will take some time to develop and fresh donor support. In the meantime our existing website can be accessed at: **http://www.oneworld.org/patp/**

The small team at Planet 21 sends its best wishes to our readers, and its thanks to our sponsors, donors, associates, contributors and editorial advisors for their co-operation and support over the years. Our final millennium issue will be published in December.

John Rowley Editor-in-Chief

Front cover: After the bulldozer: an image from Africa.
Credit: Mark Edwards/Still Pictures
Left: The plight of the Ogoni people in Nigeria from oil pollution encouraged Shell's commitment to good 'corporate citizenship'.
Credit: Sarah Leigh-Lewis/ Environmental Images

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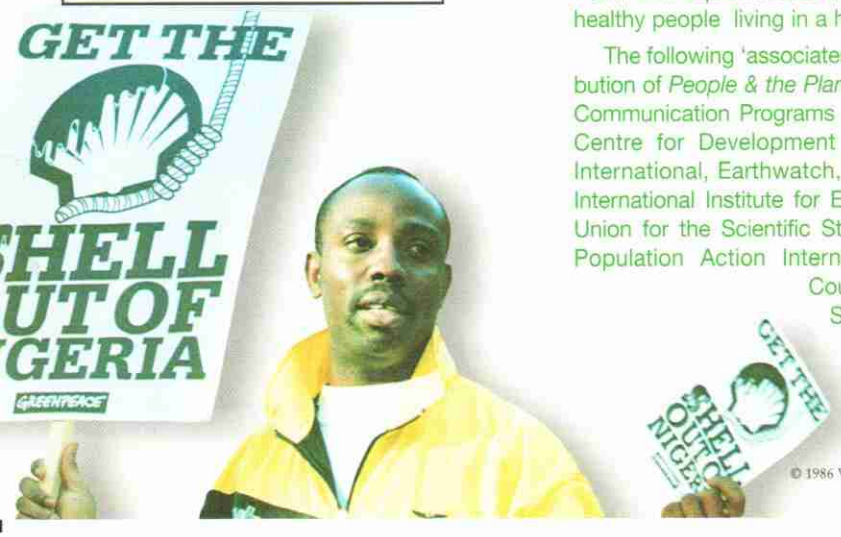

People & the Planet

No soul to be damned

A good starting point for readers of this issue is the debate on pages 30-32 between Peter Knight and David Korten on *Can corporations be trusted?* That encapsulates two visions of the future which divide commentators of all shades. On the one side are those like Lester Brown of the Worldwatch Institute who take heart from the recent moves by some chief executives of global companies who now acknowledge that the global economy is on a collision course with nature, and that fundamental changes will have to be led by industry itself. Such respected environmentalists are supported by eminent advisers to business, such as John Elkington who spells out, on page 10, the imperatives which are now causing corporations to look beyond the bottom line of profit to the penalties which come so swiftly when environmental and social considerations are ignored by the captains of industry. Such commentators point to the way in which many corporations – including those featured here – are espousing eco-efficiency and developing both environmental and social audits of their activities.

On the other side are those who, like David Korten, see no future in a world increasingly dominated by a few thousand, hugely rich and powerful transnational corporations, answerable only to the shareholders and "with no soul to be damned and no body to be kicked" as Baron Thurlow put it. John Madeley in his new book, *Big Business, Poor Peoples*, does a good job in revealing explicitly the way in which smallholders in developing countries are at the mercy of agribusinesses which dominate world markets, mothers are exploited by baby food manufacturers, forest dwellers lose out to loggers, and local fishermen to corporate fishing fleets. Environmental and social issues are not, he says, in the forefront of corporate concern by mining companies, tobacco firms, dam builders and multinational hotel chains. Profit certainly is.

But change is in the air and, as Andrea Spencer Cooke explains in her introductory overview, the language of big business is certainly quite different from what it was just a few years ago. Some companies, such as Interface and Xerox, have seen the light when it comes to increasing their efficiency while reducing their use of energy and resources and saving on waste. Others, like Nike, have learnt the hard way to listen to their customers. Our purpose in this issue is to examine these changes, which bring hope for the future, rather than to harp on the evils which persist. But both need attention, for only by public awareness, pressure from consumers and NGOs, and government action, will the spreading power of transnational corporations be curbed and their board rooms be persuaded to take the new road to a fair, sustainable and truly profitable future.

John Rowley

People & the Planet is sponsored by the United Nations Population Fund, the World Conservation Union, the World Wide Fund for Nature, the International Planned Parenthood Federation and the Swedish International Development Co-operation Agency. It is published by Planet 21, an independent, non-profit publishing company in association with a wide range of international non-governmental organisations. Additional support for this issue comes from the Hewlett Foundation. None of the sponsors or supporters takes responsibility for articles in this publication. All are united, however, in the belief that people, their consumption, their technologies and their numbers, interact with the environment of our planet in ways which need to be explored – and that a path needs to be traced towards a sustainable future for healthy people living in a healthy world.

The following 'associates' are partners in the development and distribution of *People & the Planet*: Audubon, AVSC International, Center for Communication Programs – Johns Hopkins School of Public Health, Centre for Development and Population Activities, Conservation International, Earthwatch, Family Health International, Futures Group, International Institute for Environment and Development, International Union for the Scientific Study of Population, Pathfinder International, Population Action International, Population Concern, Population Council, Population Reference Bureau, Royal Swedish Academy of Sciences, Television Trust for the Environment, WWF-Alliance for Religions and Conservation.

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newsfile

GM BACKLASH

ISF/Environmental Images

Following widespread opposition in Europe to genetically modified foods, the world's two largest food production companies have begun phasing our their use of genetically engineered ingredients in certain markets. Both Unilever UK and Nestlé UK announced their decision in April, although it was not immediately apparent how widespread the ban would be elsewhere.

Unilever, an Anglo-Dutch firm, sells over 1,000 brands of foods through 300 subsidiary companies in 88 countries worldwide, with products on sale in a further 70 countries. Nestlé, with headquarters in Switzerland, is the world's largest food production company with some 500 factories around the world.

According to a Nestlé spokesman "The company is fundamentally in favour of genetically modified foods and has no worries about the sustainability and quality of such raw materials. But where the consumer generally does not welcome such foods we will offer an alternative product." So far, he told *People & the Planet* "that applies to a very few European countries."

Greenpeace, the campaigning environmental organisation, said the announcements by Unilever and Nestlé represent a major victory for European citizens. "When Monsanto's first GE (genetically engineered) soya beans were shipped to Europe, Nestlé, Unilever and Monsanto told us there was no way to stop having GE ingredients in our food. Three years later they have learned that there is no way to ignore the concerns and demands of the majority of consumers."

The opposition to GM foods was sparked off in the United Kingdom by research which appeared to show that experimental rats had been harmed by eating modified potatoes, but the debate has widened to include concern about the long-term impacts on farming and wildlife of genetically modified crops.

A major report by the UK charity, Christian Aid, published in May argues that GM crops are "irrelevant" to ending world hunger, and would instead "create classic preconditions for hunger and famine." They would concentrate power in too few hands and strip small farmers of their independence, not least through the use of seeds containing a terminator gene which could become so widespread that farmers would only be able to buy seeds that did not re-germinate.

Contact: Christian Aid, PO Box 100, London SE1 7RT, UK. Tel: +44 (0)171 620 4444.

GIANT WINDMILLS

Denmark has decided to build a series of offshore wind farms to generate half the country's power. The 2,000 giant turbines will be four times as big as existing models, with blades 200 foot in diameter on 180 foot towers.

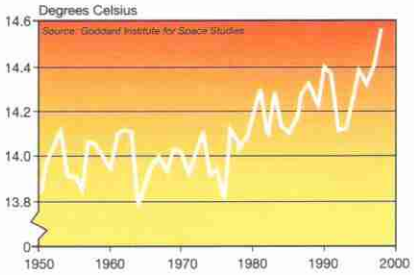
The plan, announced in May, will enable Denmark to meet its commitment to cut greenhouse emissions by eight per cent and to build up its successful turbine manufacturing business. It has already signed agreements to export energy to Norway, Sweden and Germany when its giant windmills are operating in the North Sea and the Baltic by 2008.

By then, it is estimated that wind energy in Denmark will generate as much energy as eight medium-sized coal fired power stations – and it should provide half the country's energy needs by 2030.

Denmark has been a world leader in wind energy, and already has some 5,000 turbines in the countryside, encouraged by investment incentives and enthusiastic public support. It decided to go ahead with the giant offshore windmills after trials exceeded expectations.

Sven Auken, Minister of Energy and Environment, said: "We have spent a long time studying this, and developing the technology. Offshore wind power is as cheap to produce as new build coal fired stations and comparable with gas, but without the disadvantages of carbon dioxide. It is of course much cheaper than nuclear."

See *People & the Planet* Vol 8/2 for more information on sustainable energy.



Average temperature at Earth's surface 1950-98

Source: Goddards Institute for Space Studies

VITAL SIGNS

The Worldwatch Institute's *Vital Signs 1999* does its usual wonderful job in highlighting global trends, beginning with last year's surge in global temperature which has taken the graph it has been using for years right off the page.

During 1998, the Earth's surface temperature jumped to a new high of 14.57 degrees Celsius, up 0.17 degrees on the previous year's unusual high increase. This was accompanied by the largest jump in the global concentration of carbon dioxide, probably related to the extensive burning of tropical forests.

Among other insights is the contrast between growing obesity in the industrialised countries and malnutrition in the poorest ones. Latest figures show that 55 per cent of the US population is overweight, while the figure in Russia is 54 per cent and in Germany 50 per cent. Under-nutrition, at the same time, takes the lives of 17,000 people every day – most of them infants and children.

Meanwhile the number of transnational corporations has risen from around 7,000 to 54,000 – the largest of

them bigger in size and influence than many national governments. At the same time, the number of international NGOs has grown from 1,000 in 1950 to 20,000 today – with a corresponding rise in influence over events.

Vital Signs 1999 is available from W.W. Norton, New York, or from Earthscan, London, for $13 or £12.95.
Or order the 1999 Worldwatch Database Disk for $89 plus $4 for shipping and handling, from Worldwatch. Tel: (+1 202) 452 1999, Fax: (+1 202) 296 7365.

SWEDISH GOALS

The Swedish parliament has approved 15 environmental goals that it hopes will help it achieve sustainable development within one generation – as promised by the prime minister, Goran Persson, in September 1997.

These call for clean air, unpolluted groundwater, living lakes and waterways, vibrant water meadows, a sea in balance and a living coastline, balanced use of fertilisers, absence of acidification, living forests, a rich landscape, healthy mountain ecosystems, a good built environment, a poison-free environment, absence of radiation, a protective ozone layer, and limited climate effects.

These goals result from a boiling down of more than 150 previous policy objectives, and were conceived in parallel with the new national environmental code, which passed into law in January. Detailed work has now begun on specific targets, with action programmes and an assessment of the social and economic impacts, so that a final strategy can be put in place by June 2000.

The most obvious targets for early action are thought to include brominated flame retardents and chlorinated paraffins.

POPULATION UPS AND DOWNS

The rapid acceptance of family planning in Mexico has helped slow population growth quite dramatically, according to the latest reports. Over the past 25 years the growth rate has dropped from 3.3 to 1.8 per cent a year, and the country should reach the year 2000 with just under 100 million people.

According to Interior Ministry State Secretary, Fernando Soles Camara, without family planning, Mexico would have 143 million residents. He said the number of women using birth control had increased from 15 per cent in the early 1970s to 68 per cent. At the same time the number of abortions (which are illegal) has fallen from 600,000 to about 200,000 per year. Life expectancy has risen from 62 to 75 years.

Mark Edwards/Still Pictures

Another report, in the French newspaper *Le Monde,* quotes a study by Nord-Sud Export which claims that the population growth in China has been higher than officially reported. It says the growth rate from 1975 to 1995 was nearer to 2 per cent than the official 1.6 per cent, giving China a current population of 1.5 billion people.

There was no comment from the Government on this report, but speaking at a conference in March, President Jiang Zemin called for urgent measures to control population growth and improve environmental protection.

According to the Xinhua News Agency, he said uncontrolled population growth would lead to a wide range of problems, including food shortages and an education crisis. More effort should be made, he said, to "supervise birth control work" in rural areas.

Meanwhile, the first-ever census in Palestine indicates that the population is likely to double within 16 years, from three to six million. The census, conducted by the Palestine authority, estimates that 3.5 million would live in the West Bank and 2.2 in the Gaza strip by 2015. Forty-seven per cent of the population is under 15 and the total fertility rate per woman is 6.1. The census was assisted by funding from UNFPA which is also helping to facilitate health services for women.

PEACE PARK

Africa's first Peace Park, binding together Botswana's Gemsbok National Park and South Africa's Kalahari Gemsbok National Park in the arid southern Kalahari Desert, was officially signed into being in April.

It was the fruition of a long-cherished dream for Dr Anton Rupert, South Africa's Chairman of the Peace Parks Foundation which aims to create a series of trans-boundary parks throughout southern Africa which will allow animals to migrate along natural corridors and strengthen conservation across national borders.

The completion of the new park agreement will "show the world that southern African countries are genuinely committed to making the dream of a network of peace parks become a reality," he said.

See *People & the Planet* Vol 6/4 for more information on Africa's Peace Parks.

CLEANER CARS

For the first time, the US federal government has set a uniform tailpipe emissions standard for cars, sports vehicles and light trucks which would make cars 77 per cent cleaner and trucks 95 per cent cleaner than today's models. The new standard is due to begin in 2004 and be phased in over the next five years.

The proposed measures, when fully implemented, would reduce vehicle emissions to a level equivalent to taking 166 million cars off the road. As a result, the Environmental Protection Agency calculates that it would prevent some 2,400 deaths, 3,900 cases of chronic bronchitis and tens of thousands of respiratory problems, every year.

Martin Bond/Environmental Images

The new standard is estimated to cost the average family car driver $10-20 extra a year. It will be introduced after further public consultation.

FOREST PLANS

The World Commission on Forests and Sustainable Development has finally produced its long awaited blueprint to solve the global forest crisis.

After holding hearings in five continents, it concluded that it was possible to solve the world's material needs from forests without jeopardising their ecological services.

To help do this they proposed a Forest Trust with four components:

- A Forest Watch to gather information and challenge the corrupt activities of timber corporations, officials and politicians.
- A Forest Management Council to help standardise eco-labelling and certification of forest products and other sustainable practices.
- A Forest Ombudsman, in the form of a network of independent officials, to pass independent judgement on corruption, inequity and abuse of forest operations, and
- A Forest Award, to recognise and reward good performance

If all this is not done quickly, says Dutch Commissioner, Hemmo Muntingh, the last chance to enjoy pristine tropical forests, where the vast majority of all terrestrial plants and animal species live, will be lost.

Just how urgent that challenge is was highlighted by a report by Woods Hole Research Centre scientist, Dr Daniel Nepstad, that the Amazon forests in Brazil are disappearing more than twice the rate reported by the Brazilian authorities.

More hopeful, was the signing in March of the Yaoundé Declaration containing plans to protect vast tracts of forest in the Congo Basin, Central Africa – the second largest tropical forest in the world. Sponsored by WWF, the Governments of Cameroon, Gabon, Central African Republic, Congo-Brazzaville and Equatorial Guinea agreed to establish a series of national and trans-border conservation initiatives and protected areas.

As the planet warms, pollution spreads, resources deplete and population grows, big business is under pressure to meet its social and environmental responsibilities in the global market place. Here, **Andrea Spencer-Cooke**, Associate Editor of *Tomorrow* magazine, assesses the response so far.

Treading lightly

Pick up the environmental report (CER) of a leading multi-national corporation today and you may well rub your eyes in disbelief. For the wording, the concepts, even the values seem increasingly indistinguishable from those of the most reputable environmental campaigners.

Take the introduction to global consumer products company Gillette's 1998 report: "We must move" insist Chairman Alfred Zeien and President Michael Hawley, "beyond efficiency improvements to the much greater challenge of conserving resources for the future needs of a growing world population." Resource needs, population and no mention of hard-nosed profit? What on earth is going on?

Welcome to the era of proactive business. Targeted for decades by environmentalists, regulators and consumer watchdogs, pressured to face up to a legacy of environmental degradation and mismanagement, a growing number of big companies finally appear willing to take up the reins of good corporate citizenship, assume responsibility for their environmental impacts and listen to their stakeholders.

It marks a sea change in corporate thinking. And although many would argue it is long overdue, the pace of change has been truly astonishing. What is happening is that companies are starting to see environmental excellence as a source of competitive advantage.

At the root of this transition has been the wake-up call that rather than just being a pariah and part of the problem – mindlessly plundering non-renewable resources and heedlessly contaminating air, soil, water and health beyond the earth's capacity to absorb it – industry is also part of the solution: a purveyor of cleaner, more efficient products, innovative processes and better quality of life.

By reducing ecological burdens and moving voluntarily beyond compliance, companies can demonstrate they are trusted stewards of the environment who deserve their license to operate. Moreover, by managing resources more 'eco-efficiently' – using fewer inputs and producing less waste for the same unit of output – companies can benefit both the planet and the bottom line.

As President and CEO Michael Treschow asserts in the Electrolux

group 1998 CER: "Corporate environmental work is not a luxury to be discontinued during hard times, but a tool both for survival, long-term advantage and increased shareholder value." For Electrolux, at least, the strategy appears to be paying off. The company's 'green range' environmental performance indicator, introduced some four years ago, demonstrates that, in the words of Per Grunewald, Senior Vice President of Group Environmental Affairs: "Products with high environmental performance show higher profitability than the average range."

As this logic of enlightened self-interest dawns on industry and the benefits of investing in sound environmental management begin to manifest, a fundamental transformation is occurring. Companies are beginning to move beyond basic environmental management to see sustainable development as a strategic issue reshaping the core business.

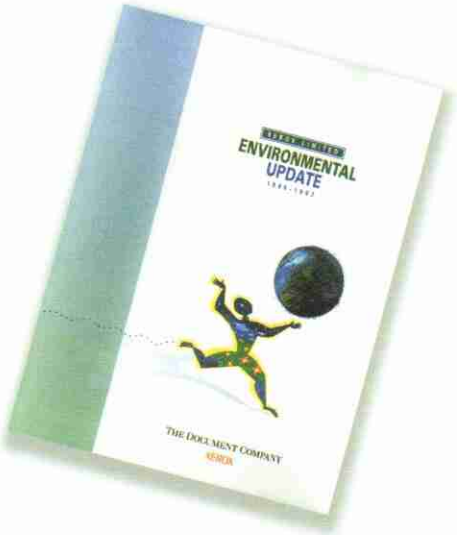
Rather than viewing environment merely as an 'add-on' it is becoming an integrated part of doing business, a key aspect of product design and a critical element in the supply chain.

Nowhere is this more evident than in the oil industry. Faced not only with a finite fossil fuel resource base but with the imminent prospect of potential man-made climate change, leading oil companies like Anglo-Dutch Shell and BP Amoco are steadily realigning themselves as energy companies (see Profile, page 22). Shell alone plans to invest $500 million in renewables over the next five years. Granted this is a drop in the ocean compared to the company's investment in exploration and new oil reserves, but it is at least a step in the right direction.

So, too, is US car giant General Motors and Japanese automotive manufacturer Toyota's joint foray into electric, hybrid electric and fuel cell technologies for the cars of the 21st century. If not doing much to tackle congestion, their research should at least make significant strides in energy efficiency and air quality, two critical issues for this sector.

Even the long-reviled chemical industry has impressive progress to report. In the United States, emissions dropped 60 per cent in six years, while production rose 20 per cent, successfully de-coupling growth in pollution from growth in production. As Dow Europe's Vice President for New Businesses and Public Affairs, Claude Fussler points out: "This industry has essentially de-linked emissions from volume growth. I'm very proud of that."

More radical altogether is the example of US flooring manufacturer Interface (see page 12). An early pioneer of 'dematerialisation' – namely reducing the amount of product needed to provide a service – Interface's 'Evergreen carpet lease' programme aims not to sell square metres of carpet, but to lease flooring services to customers. Since the tiles belong to the company, there is an incentive to make them better quality and more durable and because only those tiles in high-use areas need frequent replacing, less carpet can be manufactured. Not only does this provide greater functionality to the customer, but it closes the waste loop by ensuring old carpet tiles are



Above: Xerox's Corporate Environmental Report. Main picture: Vehicle exhaust, Lisbon, Portugal. Car giants, General Motors and Toyota, are developing hybrid electric and fuel cell technologies for cleaner cars.

Peres-UNEP/Still Pictures

BUT WHAT ABOUT THE POOR? *by John Madeley*

So the environment has been "discovered" by transitional corporations. Some TNCs are making the right noises about not degrading the environment with their activities, about using natural resources in a sustainable way and so on. This is good news. There is of course a huge gap between words and action, and TNCs will now be watched very carefully to see if they translate their words into action.

The corporations are very good at public relations – capable of persuading some people perhaps that more is happening than really is happening. But on the whole the public will not be fooled. We are looking for real change. Not much change on the ground has happened yet – it is surely too early to talk of a "sea change"– but hope springs eternal.

But there is something that concerns me in all this. When TNCs talk of "corporate social responsibility" they seem to think only about the environment. There is one rather large issue over which they show very little awareness – the impact of their activities on the world's poor.

I have just spent five years researching a book on this and what I found is alarming. In every sector where they operate – agriculture, forestry, fishing, foodstuffs, mining, manufacturing, energy, tourism, and medicinal drugs – TNCs have a remarkably similar effect. The larger corporations, especially, are causing hardship for millions of the poor in developing countries. And they have scarcely begun to admit to what they are doing.

This matters even more today because with the march of privatisation, liberalisation and globalisation, power is moving from elected governments to unelected corporations: control over human and natural resources is becoming inexorably ceded to TNCs.

In agriculture, some of the large corporations are moving to control every part of the food chain, creating a curious capitalist mirror-image of former Soviet state farms. But where stands the poor farmer in all this? Take Monsanto, for example. It has applied for patents on its 'Terminator technology', or suicide seeds, in over 70 countries. This could oblige farmers to buy their seeds from the company each year. In India, especially, poor farmers are rising in revolt. Patents – gaining control over a technology – hardly squares with "corporate social responsibility".

Tobacco companies are trying to make up for declining sales in the West by selling more cigarettes in the developing world. This hits the poor in a number of ways. Low income people in Bangladesh, for example, who had been persuaded to smoke five cigarettes a day, had to cut food purchases by 15 per cent which reduced their daily calorific intake by 300 from an already low 2000. Poor farmers often work for a pittance to produce tobacco. If tobacco companies want to act responsibly, they should cease all advertising and promotional activity, increase prices they pay to Third World farmers and print health warnings on packets irrespective of what the law requires.

In the mining sector, much TNC activity is not only damaging local environments, it is creating havoc with the economies and cultures of the poor. Mining is being done with little regard for the people who live in the immediate area. Often it takes over land where people once lived and farmed, and produces huge waste dumps, which are often health hazards, contaminating water sources sometimes far beyond the immediate area. In the manufacturing sector, low wages – often lower than a country's minimum level – and long hours and poor working conditions, are common in the factories in developing countries that have been sub-contracted to make toys, garments and footwear for TNCs.

One of the most flagrant abuses of TNC power, and arguably the one with the most serious effects on millions of the poor, concerns drugs. The corporations have tried to block efforts towards national drugs policies – which means the poor are denied access to low cost, locally-made drugs. Susan George is right to point out, "the drug scene (the *legal* drug scene, that is) is nothing short of scandalous".

Do the corporations want to stop such abuses of power? Do they even recognise what they're doing? Is the public aware of what is going on? Public concern over the environment has awakened corporate concern. Consumers can make choices and decisions which influence TNC policies – this has been clearly seen over genetically modified foods. If the public now shows its concern over the world's poor, then there is hope.

John Madeley is the author of *Big Business, Poor Peoples*, published by Zed Books, June 1999, £13.95 hardback.

recycled and remanufactured.

Companies like Xerox, Swedish logistics firm ASG and Swiss lift manufacturer Schindler are also actively exploring this core business shift from selling quantity of product to quality of service, paving the way for Factor 4 or even Factor 10 increases in resource efficiency.

Arguably, this kind of radical rethinking of business strategy provides our only tangible hope for achieving any kind of global sustainability. With world population projected by the UN to reach 8.9 billion by 2050, meeting even the most basic needs of the world's people will require quantum leaps in resource efficiency. Harnessing industry's creativity and innovation in pursuit of this goal will require governments, consumers and investors to set the right framework and send the right market signals.

It is in this spirit that the three flexible market mechanisms, or 'flexmex', floated at Kyoto – emissions trading, joint implementation (JI) and the clean development mechanism (CDM) – are now being pilot-tested by proactive companies. The aim is to spur competition in CO_2 emissions reductions and encourage the transfer of climate-benign technologies to developing countries.

Although the fine print of how these economic instruments will work in practice still has to be deciphered and their actual effectiveness proven, there is no doubt that business is more likely to warm to such flexible, market-based approaches to the issue of global warming than the more controversial – but undoubtedly more potent – prospect of a tax on CO_2.

Promisingly, provided adequate safeguards are established, the CDM in particular has significant potential as a catalyst for cleaner production in the south, enabling developing countries to leapfrog more polluting, outdated industrial processes and technologies.

Globalisation, too, can exert a positive influence on industrialisation in the south, as outrage over apparent double standards in different world regions is driving corporations to adopt global operating standards wherever they have a presence. Shell, for example, has committed by 2000 that all Shell companies will have certifiable health, safety and environment management systems, with all major sites certified by 2001.

On the supply chain front, retailers like UK DIY group B&Q are using customer pressure to urge suppliers in developing countries towards improved labour and environmental conditions.

Investors, too, are actively encouraging good environmental performance. UK pension provider NPI recently launched a fund in Asia, aiming to capitalise on strong environmental performers in the emerging economies of the region, while the International Finance Corporation, which channels capital to private enterprise in developing countries, has made environmental and social performance a core factor in loan approval, encouraging higher standards in regions where these may be inadequately enforced or even totally lacking.

The picture is not all rosy, however. In terms of net impact, sheer economic growth threatens to neutralise even the best environmental intentions of the world's largest corporations. Stringent social and environmental standards in the North can also serve as trade barriers against developing country exports, begging accusations of moral imperialism and, counteractively, hindering much needed economic development.

Qualifying for a certified environmental management system may be prohibitively expensive for firms in the South and access to environmental best practice, innovation and technology limited. Worse, the dumping in developing countries of harmful wastes, obsolete technologies and banned products is still prevalent, in spite of measures foreseen under the Basel convention.

But there are also instances of best practice and innovation flowing from the South which companies would do well to heed. In Brazil, for example, the community development group POEMA is engaged in a pioneering collaboration with German automotive manufacturer Daimler-Benz to supply sustainably-sourced head-rests for Mercedes trucks, promoting local employment and environmental protection while furnishing Mercedes with an environmentally superior product. Micro-enterprise partnerships such as this hold huge promise for developing win-win-win solutions.

That multinational corporations still have a long way to go is evident. Cynics will argue that much of the apparent groundswell of change visible today, along with the assertions made in corporate environmental reports, are mere lip service. Compare the wording of these reports with company rhetoric just a decade ago, though, and it is clear that nothing short of a revolution is occurring in the corporate lexicon.

"Listening to the views of interested parties has become essential for business" insists Shell in its 1998 Health, Safety and Environment report; "leading companies know that they must understand the implications and shoulder their social responsibilities if they are to prosper." At last a reference, albeit oblique, to profit – but profit firmly linked with good corporate citizenship.

First words, then actions. Slowly, perhaps, but step by step, industry's footprint is getting lighter. ■

Andrea Spencer-Cooke is a freelance environmental strategy consultant and Associate Editor of *Tomorrow* magazine, a leading business and environment publication.

CODES OF CONDUCT *by Amy Brown*

Why should companies care about corporate social responsibility? And how much should they care? The World Business Council for Sustainable Development (WBCSD) has taken this complex issue between its teeth, wrestled with it, and emerged with some thoughtful answers in a recently published report, *Corporate Social Responsibility: Meeting Changing Expectations*.

"Corporate social responsibility (CSR) is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large."

This is the working definition of CSR, emerging from the WBCSD Stakeholder Dialogue held in The Netherlands, last September, attended by some 60 opinion makers both inside and outside business.

The resulting 32-page report, the first issued by a business organisation on this topic, traces the evolution of business ethics and looks at the challenges of making CSR a workable, measurable concept in global businesses. Most illuminating are the case studies of companies such as Shell, Unilever, DuPont, GM and Novartis. These aim to show that practising corporate social responsibility in places as diverse as Peru, Los Angeles, and South Africa benefits not only the company's global and local reputation, but can help its bottom line as well.

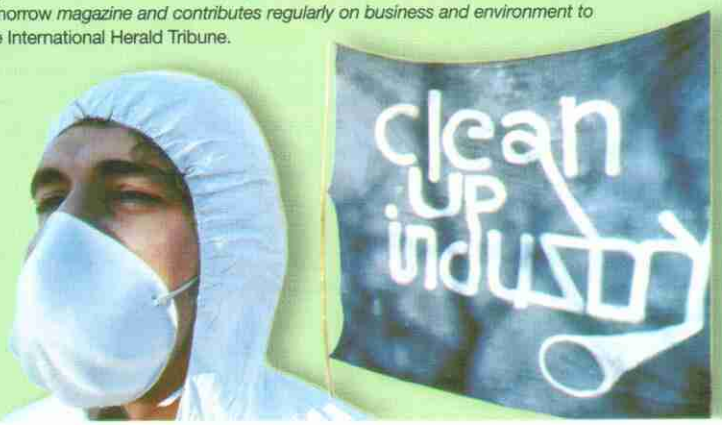
While not issuing any "one-size-fits-all" code, the WBCSD's recommendations should inspire companies to articulate their core values and produce their own codes of conduct. The report admits that not every business leader has jumped on the CSR bandwagon. Some are concerned that CSR has no clear business benefits and could destroy shareholder value by diverting resources from core commercial activities.

The WBCSD does not share this view. "A coherent CSR strategy based on sound ethics and core values offers clear business benefits," the report states. Monitoring shifts in social expectations, controlling risks, and identifying market opportunities are some of the benefits, along with improving reputation and maintaining public support.

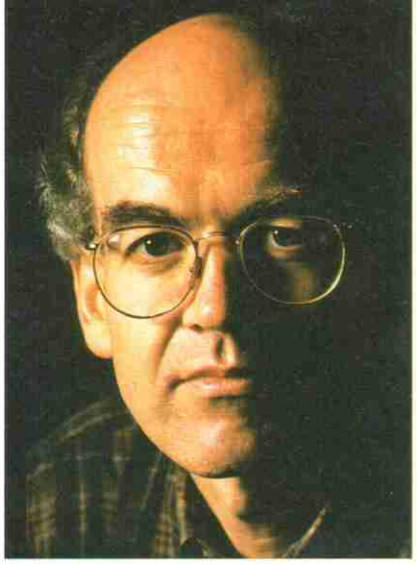
The report does not gloss over the fact that difficult challenges remain. There are dilemmas raised by the respective roles of government and business, and in integrating corporate social responsibility with management and business strategy across different cultures under fiercely competitive conditions. There are also problems in finding ways to monitor, manage, measure and report CSR. In this regard, the report offers a useful overview of the codes of conduct already developed by many organisations.

Business must do more than pay lip service to its social ideals, the report cautions; there must be strong support for action. A sceptical, highly demanding, and increasingly global society expects no less.

Amy Brown is a Stockholm-based journalist. She is a former Associate Editor of Tomorrow *magazine and contributes regularly on business and environment to* The International Herald Tribune.



Paul Glendel/Still Pictures



SustainAbility

Companies today have to face up to a 'triple bottom line'. They have to meet not only economic goals, but environmental and social ones. To succeed in the 21st century they will have to face up to seven business revolutions, says **John Elkington**.

Changing c

The sustainability agenda, long understood as an attempt to harmonise the traditional financial bottom line with emerging thinking about the environmental bottom line, is turning out to be much more complicated than some early business enthusiasts imagined.

Increasingly, we think in terms of a 'triple bottom line', focusing on economic prosperity, environmental quality and – the element which business had tended to overlook – social justice. To refuse the challenge implied by the triple bottom line is to risk extinction.

Nor are these simply issues for major transnational corporations: increasingly, they will be forced to pass the pressure on down their supply chains, to smaller suppliers and contractors. These changes flow from a profound reshaping of society's expectations and, as a result, of the local and global markets business serves.

With its dependence on seven closely linked revolutions illustrated here, the sustainable capitalism transition will be one of the most complex our species has ever had to negotiate. As we move into the third millennium, we are embarking on a global cultural revolution. Business, much more than governments or non-governmental organisations, will be in the driving seat. Paradoxically, this will not make the transition any easier for business people. For many, it will prove gruelling, if not impossible.

Markets

Revolution 1 will be driven by competition, largely through markets. For the foreseeable future, business will operate in markets which are more open to competition, both domestic and international, than at any other time in living memory. The resulting economic earthquakes will transform our world.

When an earthquake hits a city built on sandy or wet soils, the ground can become 'thixotropic': in effect, it turns to jelly. Entire buildings can disappear into the resulting quicksands. In the emerging world order, entire markets will also go thixotropic, swallowing entire companies, even industries. Learning to spot the market conditions and factors which can trigger this process will be a key to future business survival, let alone success.

In the same way that the motor car undermined a whole economy based on grooms, saddlers and farriers, the new industries of the 21st century will consign less sustainable companies – and even entire industry sectors – to the "dustbin of history."

In this extraordinary environment, growing numbers of companies are already finding themselves challenged by customers and the financial markets about aspects of their triple bottom line commitments and performance. And, although we will undoubtedly see continuing cycles based on wider economic, social and political trends, this pressure can only grow over the long term. As a result, business will shift to a new approach, using triple bottom line thinking and accounting to build the business case for action and investment.

Values

Revolution 2 is being driven by the worldwide shift in human and societal values. Most business people, indeed most people, take values as a given, if they think about them at all. Yet our values are the products of the most powerful programming that each of us has ever been exposed to. When they change, as they seem to do with every succeeding generation, entire societies can go thixotropic. Companies that have felt themselves standing on solid ground for decades suddenly find that the world as they knew it is being turned upside down, inside out.

Remember Mrs Aquino's peaceful revolution in the Philippines? Or the extraordinary changes in Eastern Europe in 1989? Recall the experiences of Shell during the Brent Spar and Nigerian controversies, with the giant oil company later announcing that it would in future consult non-governmental organisations on such issues as environment and human rights before deciding on development options? Think, too, of Texaco. The US oil company paid $176 million in an out-of-court settlement, in the hope that it would bury the controversy about its poor record in integrating ethnic minorities.

Transparency

Revolution 3 is already under way. It is being fuelled by growing international transparency and will accelerate. As a result, business will find its thinking, priorities, commitments and activities under increasingly intense scrutiny worldwide. Some forms of disclosure will be voluntary, but others will evolve with little direct involvement from most companies. In many respects, the transparency revolution is now 'out of control'.

In the wake of the Brent Spar controversy, for example, Shell talked in terms of an emerging "CNN World" in which companies would be held to account in totally new ways.

This process is itself being driven by the coming together of new value-systems and radically different information technologies, from satellite television to the Internet. The collapse of many forms of traditional authority also means that a wide range of different stakeholders increasingly demand information on what business is going and planning to do. Increasingly, too, they are using that information to compare, benchmark and rank the performance of competing companies.

Life-cycle technology

Revolution 4 is being driven by and – in turn – is driving the transparency revolution. Companies are being challenged about the triple bottom line implications either of industrial or agricultural activities far back down the supply chain or of their products in transit, in use and – increasingly – after their useful life has ended.

Right: Business faces seven revolutions says John Elkington.
Below: Protests in Nigeria changed Shell's social policy.

	Old Paradigm		New Paradigm
1 Markets	Compliance	>	Competition
2 Values	Hard	>	Soft
3 Transparency	Closed	>	Open
4 Life-Cycle Technology	Product	>	Function
5 Partnerships	Subversion	>	Symbiosis
6 Time	Wider	>	Longer
7 Corporate Governance	Exclusive	>	Inclusive

orporate culture

Here we are seeing a shift from companies focusing on the acceptability of their products at the point of sale to a new emphasis on their performance from cradle to cradle – from the extraction of raw materials right through to recycling or disposal. Managing the life-cycles of technologies and products as different as batteries, jumbo jets and offshore oil-rigs will be a key emerging focus of 21st century business.

Think of Nike, suddenly having to deal with issues linked with the social conditions of labour – particularly child labour – in parts of the world which were previously not on society's "radar screen".

Partners

Revolution 5 will dramatically accelerate the rate at which new forms of partnership spring up between companies, and between companies and other organisations – including some leading campaigning groups.

Organisations which once saw themselves as sworn enemies will increasingly flirt with and propose new forms of relationship to opponents seen to hold some of the keys to success in the new order. As even groups like Greenpeace gear up for this new approach, we will see a further acceleration of the trends driving the third and fourth sustainability revolutions.

None of this means that we will see an end to friction or even outright conflict. Instead, campaigning groups will need to work out ways of simultaneously challenging and working with the same industry – or even the same company.

Time

Time is short, we are told. Time is money. But, driven by the sustainability agenda, Revolution 6 will promote a profound shift in the way we understand and manage time.

As the latest news erupts through CNN and other channels within seconds of the relevant events happening on the other side of the world, and as more than a trillion dollars sluices around the world every working day, so business finds that current time is becoming ever 'wider'. This involves the opening out of the time dimension, with more and more happening every minute of every day.

By contrast, the sustainability agenda is pushing us in the other direction – towards 'long' time. Given that most politicians and business leaders find it hard to think even two or three years ahead, the scale of the challenge is indicated by the fact that the emerging agenda requires thinking across decades, generations and, in some instances, centuries. The use of scenarios, or alternative visions of the future, is one way in which we can expand our time horizons and spur our creativity.

Among the industries that already think long term are chemicals, oil and forestry, but this challenge will confront growing numbers of sectors in the new century.

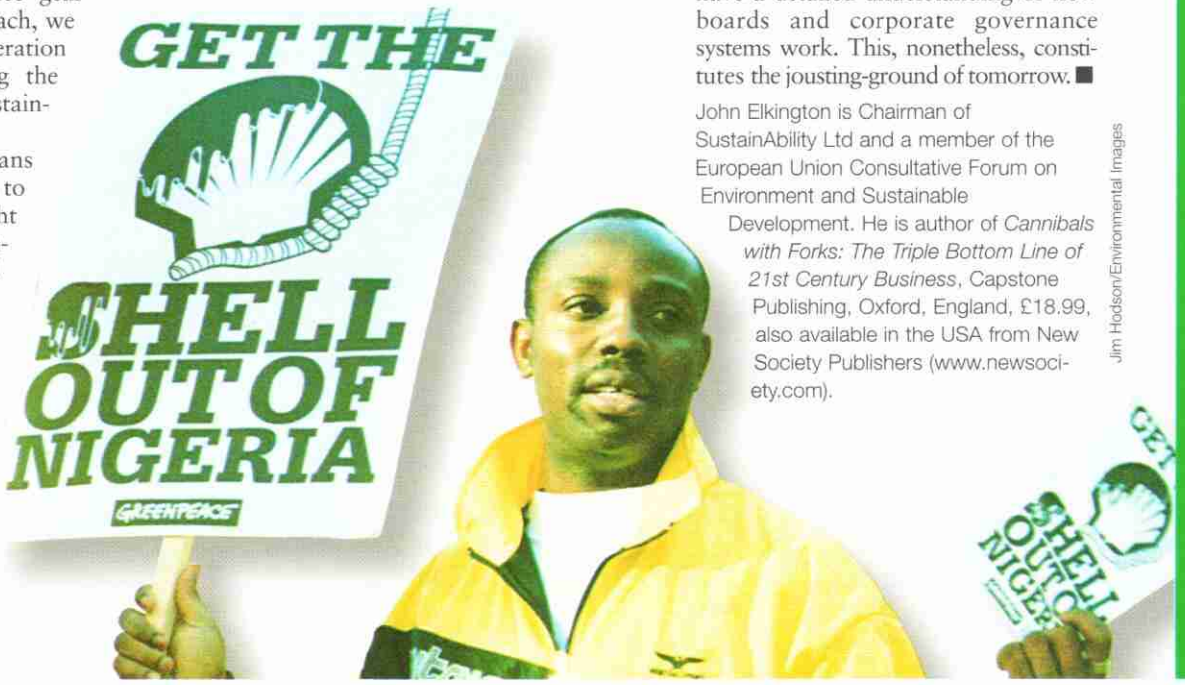
Corporate governance

Ultimately, whatever the drivers, the triple bottom line agenda is the responsibility of the corporate board. Revolution 7 is being driven by each of the other revolutions and is also resulting in a totally new spin being put on the already energetic corporate governance debate.

Now, instead of just focusing on issues like the pay packets of 'fat cat' directors, new questions are being asked. For example: What is business for? Who should have a say in how companies are run? What is the appropriate balance between shareholders and other stakeholders? And what balance should be struck at the level of the triple bottom line?

The better the system of corporate governance, the greater the chance that we can build towards genuinely sustainable capitalism. To date, however, most triple bottom line campaigners have not focused their activities at boards – nor, in most cases, do they have a detailed understanding of how boards and corporate governance systems work. This, nonetheless, constitutes the jousting-ground of tomorrow. ■

John Elkington is Chairman of SustainAbility Ltd and a member of the European Union Consultative Forum on Environment and Sustainable Development. He is author of *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Capstone Publishing, Oxford, England, £18.99, also available in the USA from New Society Publishers (www.newsociety.com).



Jim Hodson/Environmental Images

Charlie Pye-Smith

Strategies for change 1: **Interface**

Carpeting

Looking around the world for examples of corporations which take their social and environmental responsibilities seriously, the Interface carpet company stands out. **Charlie Pye-Smith** investigates, and a leading environmentalist adds his own assessment.

In 1994, Ray Anderson, chief executive of Interface, was invited by his staff to give a keynote address at an environmental meeting. Until then he had not given the environment much thought, his attitude being that Interface should simply comply with existing environmental law. By chance someone sent him a copy of Paul Hawkens' *The Ecology of Commerce*. "I read it, and it changed my life," he recalls. "It was an epiphany. I wasn't halfway through it before the vision I sought became clear, along with a powerful sense of urgency to do something."

Since then Interface, a worldwide carpet company with its headquarters in Atlanta, Georgia, has undergone some profound changes and Ray Anderson has been peddling his views on greening business with evangelical fervour. Each year he gives some 200 talks on the subject, and he now chairs President Clinton's Council for Sustainable Development. He has become the darling of the environmental movement – he was warmly received recently at a Greenpeace conference – but can a major user of petrochemicals really become a restorative company, as Anderson hopes?

"If successful," he says, "we'll spend the rest of our days harvesting yesteryear's carpets, recycling old petrochemicals into new materials, and converting sunlight into energy. There will be zero scrap going into landfills and zero emissions into the biosphere. Literally, our company will grow by cleaning up the world, not by polluting or degrading it. We'll be doing well by doing good. That's the vision. Is it a dream?"

The florid language of Interface's *Sustainability Report*, from which this call to green arms is taken, is in a sharp contrast to the plain-speaking pragmatism of Interface's environmental adviser, Steve Martin. Martin is based at Shelf Mills in Yorkshire and his task is to turn the rhetoric into a reality. He himself began work on the shop floor in the 1970s when the mill was owned by the Illingworth family. "There was always a tradition of frugality," he recalls. "But in the past we were frugal for economic reasons. Now we're frugal for environmental reasons as well."

Tackling waste

Tackling waste has been a major preoccupation for Martin and his colleagues. Over a four-year period Interface's Yorkshire mills have reduced their landfill needs by 44 per cent. Virtually everything that can be recycled is recycled. Each year over 150 tonnes of Shelf's waste yarn is carded back into nylon, then incorporated into new carpets at a nearby mill in Heckmondwike. In 1997, over 290,000 cardboard cones, weighing roughly 21 tonnes, were sent to landfill. Now the company uses plastic cones which can be used up to 20 times. Admittedly these are made from petro-chemicals, but then there will always be some hard choices to make for companies setting out on the path towards greater sustainability. All the paper used in the pleating process at Shelf is recycled, as is most of the cardboard. Even the dust produced in the manufacturing process is saved and transformed into a packing material, and waste plastic is made into a hard-wearing floor tile.

Eliminating waste also means eliminating emissions and, since 1994, Interface has got rid of 48 of its 287 smoke stacks around the world. At Shelf the volatile organic compounds from the pleating machine used to go into the atmosphere. Now they are distilled into a liquid which is used to make motorway cones.

Martin stresses that while some of the improvements depend on sophisticated technological change, often it is the simple things which matter most. "Trying to achieve sustainability isn't rocket science," he says, and he has plenty of examples to prove it. By monitoring water intake – something the mill had never done before – Interface discovered that it was leaking huge quantities into the ground. The broken pipes have now been sealed, saving both water and money. The use of intelligent lighting is cutting electricity bills, and a variety of simple measures have helped reduce heat loss in many of Interface's factories. Energy expert Amory Lovins, a member of Anderson's 'Eco Dream Team', has been among those whose advice has helped the company to cut its energy requirements and its waste output.

Earning a bonus

Interface's 7800 workers – or associates as the management prefers to call them – have played a key role in changing the way the company behaves. "The vision has to come from the top," says Martin, "but the real savings come when you involve everyone in the business."

Roughly 400 new projects aimed at improving the eco-efficiency of the business have been instituted in the

the world green

past four years, and many of these have come from the shop floor. The old hierarchical system of labour management has been largely replaced by a more democratic approach. Intriguingly, many of the older staff, preferring the old system, have moved on, and the workforce is now younger and by all accounts more adventurous in its thinking. Environmental improvements have so far helped Interface to save over £80 million, which has been good not just for the company but also the workforce who receive an annual bonus related to environmental achievement.

In practical terms, Interface's achievement has been considerable. Not only has the company cut its waste and emissions, it has also reduced the amount of raw materials used per unit of output by around 20 per cent. "We've got to the stage when we've picked most of the low-hanging fruit," says Martin. "From now on our progress is going to be harder."

The company is a significant consumer of natural resources, especially in the form of petro-chemicals, and it remains to be seen whether Anderson's dream of being a restorative company is achievable. The last of his seven "ambition fronts" – the first being to eliminate waste – involves "redesigning commerce". Essentially this means providing services rather than products. For example, some utilities in the United States now sell heat and light to customers rather than electricity. This means that it is in their commercial best interests to produce as much heat and light as possible with from least amount of energy, thus encouraging greater eco-efficiency. In the case of Interface, redesigning commerce means leasing carpets rather than selling carpets, the idea being that at the end of the carpets useful life, the company will reclaim and recycle them. This scheme is already operating in the US; Martin hopes the British mills will be doing the same before too long.

It would be easy for the sceptic to make fun of Anderson's messianic tone and the grandiloquent turns of phrase – at times he sounds like a Southern Baptist preacher – but there's no denying that Interface is a very different company now from the one it was before Anderson's conversion. Take a look at a turn of the century photograph of Shelf and the West Riding of Yorkshire. The first industrial revolution created a black, Lowryesque world of belching chimneys. Today we are witnessing the birth of a more benign industrial revolution, one without filth and waste, and Interface is helping to lead the way. ■

Charlie Pye-Smith is a freelance journalist with a special interest in environment and development issues.

Left: Steve Martin, environmental adviser at Interface.
Below: Interface's Yorkshire mills have reduced their landfill needs by 44 per cent.

PAYING A DEBT TO NATURE *by Jonathan Porritt*

In my opinion, Interface really is a leader. For one thing, it's a company that actually knows what sustainability really is, and that remains extremely rare.

There are lots of companies hard at work on reducing their environmental impacts, but that's not by any means the same thing as seeking to become genuinely sustainable. Interface's exposure to The Natural Step (which defines sustainability in strict scientific terms, going back to the basics of thermodynamics and cell biology) has made all the difference here – and the commitment to put every one of its employees through a TNS training package has produced a quite different working culture from those companies where the environment 'belongs' to a few specialists and senior managers.

Because it knows what sustainability is, Interface has recognised that simply getting more energy efficient, for example, simply isn't enough. It has committed itself, over time, to phasing out the use of all fossil fuels, systematically moving over to renewable sources of energy. At a time when the price of fossil fuels is at its lowest point for decades, and renewables are only just getting going in serious commercial terms, this is one hell of a challenge!

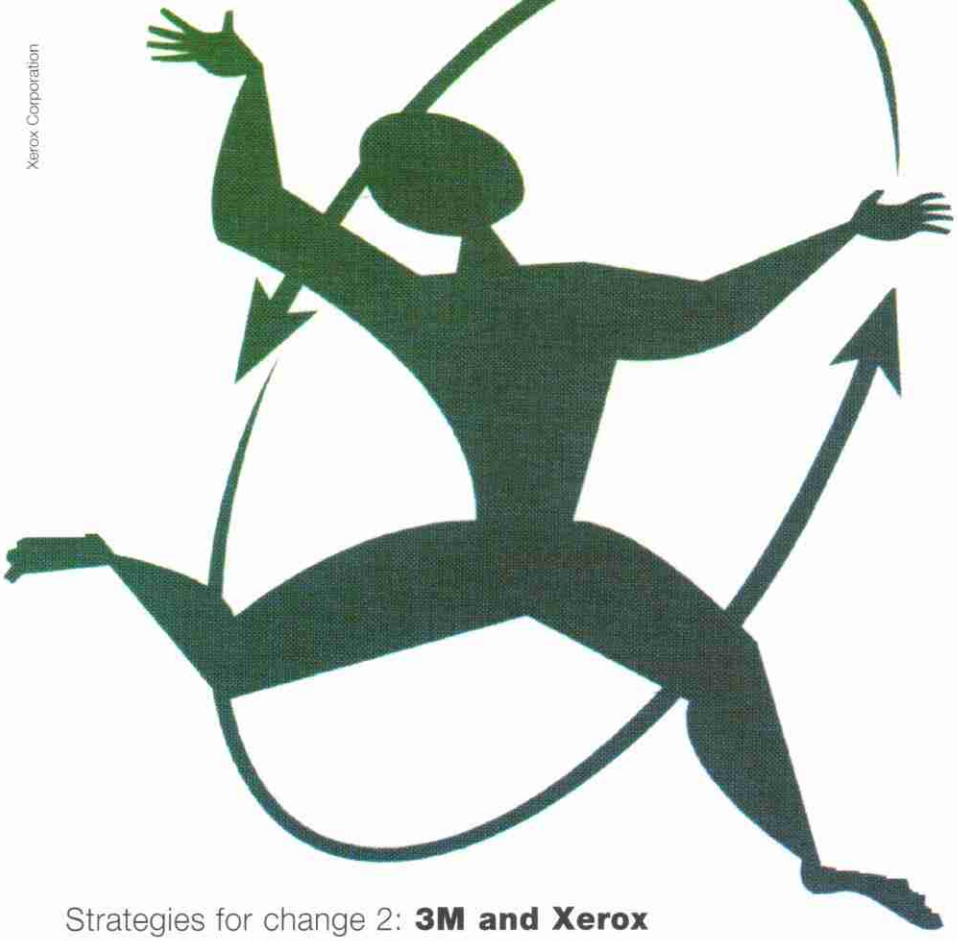
In a bold rhetorical flourish, Interface has also said that it aspires not just to becoming a sustainable company, but a 'restorative company', by which it means that it intends to 'repay its debt to Nature'. That isn't quite as fluffy a notion as it may sound.

Over the last two years, Forum for the Future has been working with Interface and the Chartered Institute of Management Accountants to put a price on that debt to Nature in terms of the damage it inflicts on the natural world (through emissions of CO_2, for example) without paying for it. This sum is, in fact, a direct subsidy from nature to us, and a company's profits will never be genuinely sustainable until that subsidy is axed and a fair price paid. But it takes courage to open up that particular can of accounting worms!

Every company has its blind spot, and for Interface, it's the social and community dimensions of sustainability that are still weak. It has no 'socio-metrics' to match the formidable 'eco-metrics' it has used to drive down waste and inefficiency over the last five years. It needs to address this urgently if it is now to build on its hard-earned reputation for real leadership in this most crucial of all business challenges.

Jonathan Porritt is Programme Director of the UK-based Forum for the Future, a new solutions-orientated charity dedicated to sustainable development.

PhotoDisc Stock Photography



Xerox Corporation

Strategies for change 2: **3M and Xerox**

A tale of two companies

There is a better than even chance that if you have a photocopier in your office it will have been made by Xerox Ltd. And you will undoubtedly have some products – post-its, floppy disks, mouse pads – made by another multinational company, 3M. These two companies are widely recognised as being at the forefront of the movement to green industry from within.

3M's 'Pollution Prevention Pays' programme dates from 1975, although it hid its light under a bushel for many years. "Industry was always being attacked by environmentalists and we used to be very defensive," recalls Richard Smith, the company's health and safety manager. "We were very wary of speaking to journalists." All this changed around 1990, following a positive review by a specialist environmental magazine. "We've now come out of our shell," says Smith.

3M's environmental policies are undoubtedly reaping financial dividends, and it claims to have saved over $800 million – and prevented 771,000 tonnes of pollutants from entering the environment – since 1975. 3M's pollution reduction programmes vary from the relatively simple to the technologically complex.

A classic example of the latter involved the redesign of spraying booths. These used to generate some 500,000 pounds of over-spray a year, and this had to be incinerated. The amount of residue has now been dramatically reduced and has helped 3M save around £125,000 a year. Since 1993, 3M has cut its volatile organic emissions by 75 per cent and its waste generation by a quarter. Just as significantly, it has reduced the amount of energy it uses per unit of production by 15 per cent.

Xerox has a similarly long-standing commitment to eco-efficiency, and has set itself the ambitious goal of producing waste-free products for 'waste-free' offices.

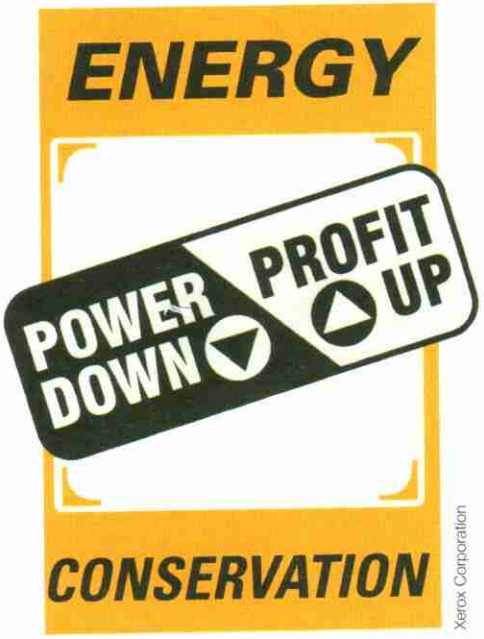
At its Mitcheldean plant in the Forest of Dean, England, 27,500 old carcasses – spent machines – are broken down each year into their constituent parts. Virtually every bit is either reused in new machines or recycled in one form or another. When I visited the factory, the manager of the recycling division was much put out by the fact that he was having difficulty disposing of certain plastic panels. Not that there was any question of throwing them away. Instead, Xerox was paying for them to be taken away and recycled by another company. Xerox's asset management programme has significantly reduced its consumption of raw materials, saving its some £50 million since 1996. Its landfill requirements have been reduced by three-quarters since 1993 and over 90 per cent of its waste is now recycled.

As far as Xerox and 3M are concerned, good environment practice makes good business sense, and this is a point of view which they try to instil in their suppliers. Both companies have also involved their workers in their war on waste and their quest for greater efficiency. 3M has encouraged its employees to participate in its pollution reduction programmes, and Xerox provides financial bonuses which ensure that its service engineers return old machines for recycling. ■

Charlie Pye-Smith

Above: Xerox's recycling logo.
Below: Old Xerox photocopies for stripping and recycling of parts.

Charlie Pye-Smith



Xerox Corporation

Following Fabian footsteps

Most of India's old industrial groups began as trading concerns and they tend to be quite mercenary in their approach to business. Green issues are considered an indulgence. The exception are the Tatas, one of India's biggest and oldest. Its turnover in 1997-98 was over US$9 billion.

Early this century, Jamsetji N. Tata set up India's first steel plant in a village in Bihar state in the face of scepticism of Raj officials. It is now known as the steel town of Jamshedpur, the country's best planned city. It is certainly the only one where water can be drunk from the tap. What is more, Tata Steel has since 1980 formed a social audit committee to scrutinise its affairs.

The idea is to see whether the company has fulfilled its objectives regarding "its social and moral responsibilities to the consumers, employees, shareholders, society and the local community". This was inspired by the health scheme that Sidney and Beatrice Webb, the Fabians who founded the London School of Economics, formulated in 1912 for the original village at the behest of Sir Dorab Tata.

'Tata Steel believes that Industry and the environment are irrevocably linked, and one cannot progress without the other. We are therefore totally committed to improving the environment.'

Tata Steel, which had a turnover of US$1.5 billion in 1997-98, has been concerned about pollution control, rural development and providing relief in natural disasters like floods and earthquakes, of which Bihar has more than its fair share. There are tribal (aboriginal) inhabitants living around the town and Tata Steel Community & Social Welfare department, the *Adivasi* (Tribal) and *Harijan* (Untouchable) Welfare Cell and Rural Development Society have improved the quality of life for 400,000 people in Jamshedpur and its environs.

There have been very cordial relations between Tata Steel workers and the management. Amazingly, there have been only three strikes in its entire history – all in the 1920s. J.R.D. Tata, who until his death earlier this decade, was widely acclaimed as the doyen of Indian industry, instituted an elaborate three-tier system to attend to workers' grievances.

Tata Steel has been concerned about the nuisance caused by slag and the smoke and noxious gases spewed out from chimneys in the steel plant. Despite installing electrostatic precipitators in the first sinter plant, there is still evidence of dust and grime, while pollutants from the second have been eliminated totally. After the first Social Audit Commission report passed strictures, an environmental management division was set up in 1986 and has spent $6.4 million so far. The Confederation of Indian Industry awarded Tata Steel a prize for environment and pollution control a decade ago.

Because it was the first heavy engineering project in the group and created an entire township in the process, Tata Steel has pioneered such social concerns. Other Tata companies have taken their cue from it. Tata Engineering and Locomotive Co., Telco, based in Pune, which manufactures heavy vehicles in collaboration with Mercedes Benz, diversified into Mercedes automobiles and recently designed its own small car, has integrated community development as part of its business plans. Using its organisational strength, it has transformed 800 acres of waste land into what it calls "an urban Arcadia", along with a bird sanctuary. It recently unveiled a diesel truck which conforms to the Euro-I emission norms, a year ahead of their introduction in India. The company had a turnover of US$2.4 billion in 1997-98.

However, in a recent knee-jerk reaction to an article against the use of diesel in automobiles by Anil Agarwal and Sunita Narain, respected environmentalists who head the Centre for Science and Environment (CSE) in New Delhi, Telco asked the authors along with the financial daily to clarify that they did not intend to malign the company by publishing a picture of two of its diesel vehicles, failing which it would claim US$23.5 million in damages. The case has since been dropped, but not without harm to the good reputation that the Tatas have gained in dealing with environmental issues.

The three Tata power companies, which collectively are known as Tata Electric, have undertaken a range of environmental schemes, including the planting of trees and the provision of drinking water and fish fingerlings to village governing councils free of cost. Considering the rejection of most conventional power producers in India of renewable forms of energy, it is heartening to see solar cells on top of a dam erected by Tata Hydro-Electric at Lonavla, on the road between Mumbai and Pune. However, this company was responsible for the displacement of several villages when it built the Mulshi hydel dam in the 1920s, which saw the baptism of many illustrious social activists in what was then Bombay state.

Other initiatives include Tata Tea's use of renewable energy in its 9,000-hectare fuel plantations in south India, while waste heat recovery in its north Indian plants have reduced energy use by a fifth. Instant tea waste is recycled through vermiculture and the company encourages the use of organic manures to reduce dependence on inorganic chemicals. It is now planning to harness wind and solar energy.

It also manages a national park at Eravikulam, in the Western Ghats (hills), which run parallel to the west coast. The sanctuary is famous for the Nilgiri tahr, a rare mountain goat. An NGO formed to protect these high ranges is manned by Tata Tea officials. ■

Darryl D'Monte

Darryl D'Monte is a freelance journalist and author specialising in environmental issues, based in Mumbai (Bombay).

Below: Tata steel works.

Vivek Das/Tata Steel

Best foot fo

How do you transform an $8 billion company, with 20,000 employees worldwide, from a pariah into a pioneer? In the case of Nike, one determined step at a time, says **Joel Makower**.

Nike/Jeff Lee Photography

For the past five years, Nike, the Oregon-based maker of athletic footwear and clothing has been running a foot race – trying, with varying degrees of success, to stay ahead of its critics. It's a marathon, to be sure, one the company is intent on winning.

It hasn't been easy. Nike remains the handy target for a variety of interests: activists, athletes, consumers, competitors, reporters, and regulators all have taken aim at the company's workplace, environmental, and human rights practices. For a company which claims a strong commitment to social and environmental responsibility, it's a worst-case scenario.

According to its critics, Nike has engaged in a variety of practices that have exploited the Third World workers who make its products, as well as the communities and the natural environment where they live. The images proffered by Nike's critics are vivid: women and young children toiling for long hours for low pay in squalid conditions, breathing fumes of toxic chemicals, unable to protest for fear of losing their jobs, manufacturing shoes whose price tags exceed their monthly pay.

Nike acknowledges that in the past it was less than vigilant of the practices of its factories – nearly all of which are contracted to independent manufacturers – but it has launched an aggressive and ambitious effort not only to correct such situations, but to set an example for its industry.

Doing this has become nothing less than a mission for Nike. "We've come to a point that we recognise that we're going to be a poster child for overseas manufacturing," says Sarah Severn, Director of Environmental Action. "But more importantly, I think the company has realised that the only way to change people's perception is to change the reality – to make sure that we put a lot of effort into the actions that we take."

Changing the reality has involved thinking big. Severn and her team have set their sights on the lofty goal of 'sustainability' – conserving resources, doing no harm, and creating no waste in the manufacture, use, and disposal of its products. To achieve this, Nike has undertaken a broad range of initiatives, harnessing the company's culture of innovation to re-invent its products and the way they are made. For example, the company has begun using sustainability as a design criteria to reduce the use of toxins and the generation of waste in its manufacturing. Nike eliminated the use of 800,000 gallons of solvents in its adhesives in one year and has a goal of reducing its use of volatile organic compounds per unit of production by 90 per cent by 2001. The company is working to support the development of organic cotton farming, including providing incentives to farmers to switch to organic production. Nike T-shirts already include a small portion of organic cotton, which the company plans to gradually ratchet up as supplies become more plentiful and reliable.

The company's ultimate goal is to 'close the loop' on its products by recycling materials from old products into new ones. Nike sees its 'Reuse A Shoe' Program as a first step in this direction. Under this program, Nike takes back old products and finds a new use for them as raw material for building playgrounds in inner cities.

But it may be in its Asian factories that Nike's commitment to improving its performance may be most evident. The company has embarked on an effort to embed sustainability principles within its nearly 40 footwear manufacturing facilities in six Asian countries. Last year, Nike began rolling out a series of nine, two-day workshops to help its contract facilities develop environmental, health, and safety management systems. At the end of the year-long process, participating factories not only will have dramatically improved their performance but also will have the necessary information and systems in place to pursue ISO 14001 certification, an international standard being

rward?

Nike

pursued increasingly by a wide range of global companies. Nike's goal is that every footwear factory will have a functioning environmental management system in place by 2001.

Why do this? "We don't really have any immediate payback for Nike other than knowing that we've done what we should be doing as a corporation," says Paula Valero, manager, strategic environmental management. However, she notes, "We believe that this will improve quality in the long term – either because we've eliminated solvents in the production process and the workers are more productive, or because they start to make the products differently to reduce the amount of waste they're generating."

Nike's interest in the environmental performance of its Asian suppliers was spurred in part by questions from customers about what chemicals were used in its shoes; many consumers were trying to avoid chemical sensitivities and allergies. "That prompted us to say, 'We don't know a lot about the whole manufacturing process,' " says Valero. "We know how the shoe is supposed to be made from a performance standpoint. But we don't usually dictate chemical usage. We knew we needed to take more of an interest in the manufacturing process: What was being used, how it was being managed, and what was ending up in our product."

The answer is more complex than most people realise. Making a typical athletic shoe involves more than 100 raw materials, says Phil Berry, Nike's global pollution prevention manager. Some are included in the product itself, others expended during the manufacturing process. Included are such solvents as toluene and methyl ethyl ketone, both of which are hazardous to humans and the environment. Nike has eliminated two-thirds of these solvents since 1995.

There are other efforts to turn Nike's sustainability vision into a business strategy. Nike has launched a micro enterprise program in Vietnam, loaning small amounts of money to women to fund business start-ups; some of these women may become Nike contractors. The company has established independent monitoring of its contractor factories, raised the minimum wage in some countries, cut ties with abusive contractors, and joined with competitors in a White House Apparel Industry Partnership to propose voluntary workplace guidelines. None of which seems to have stemmed the tide of criticism.

Over the past two years, Nike has been named among the ten "worst" international corporations; had an Indonesian factory looted and burned by protesters; and suffered criticisms by US women's groups, who pilloried the company for commercials that call for empowering women while poorly paying its predominantly female overseas workers. Its own hometown of Portland adopted a resolution urging its troubled school district to "respectfully decline" a $500,000 cash donation because of the company's alleged human rights abuses.

But there are signs of progress. Earlier this year, Nike won praise from several of its critics due to the company's efforts to improve air quality at one of its factories in Vietnam. In March, the company challenged its competitors to join Nike in revealing the locations of its overseas suppliers and allow independent monitors to inspect them. And *Working Mother*, a US magazine, named Nike among the "100 Best Companies for Working Mothers."

"We can't keep saying, 'We're not guilty,'" says Severn. "We have to get on with it and say, 'Let's set an example for the rest of the industry. Let's set an example beyond our industry.' Eventually, we will be judged by the actions that we take." ■

Above: Nike logo recognised worldwide.
Left: Nike recycling bin – part of its 'Reuse A Shoe' Program.
Below: Inside a Nike trainer factory, Indonesia.

Joel Makower, based in Washington DC, is editor of *The Green Business Letter* (www.greenbiz.com).

Irene Slegt/Panos Pictures

Julio Etchart/Reportage Still Pictures

Country report 1: **The Philippines**

Rapidly industrialising Asian countries are experiencing especially severe environmental damage. But in the Philippines, as elsewhere, some businesses are trying to 'go green'. **Henrylito Tacio** reports.

'A moral o

The problem of pollution is no longer a monopoly of industrialised countries. Developing countries like the Philippines now also suffer from pollution as a consequence of increased business activity, the concentration of population in urban areas and the use of advanced technology.

"Pollution is a problem of no mean proportion simply because it is detrimental to human health and welfare," notes Gregory Ira, environment specialist of the Cavite-based International Institute of Rural Reconstruction (IIRR). "This is precisely why we often hear of people in a vigilant campaign against pollution."

In Cebu, for instance, a Philippine-German company has been meeting with resistance since it proposed to set up an oleochemical plant in 1995. Owners of beach resorts near the project site say the US$300 million plant will pollute the waters.

In San Roque, Pangasinan, a plan to build a dam is stirring dissent. The Marcopper mining disaster in Boac, Marinduque has sent alarm signals to local populations hosting mining companies as well as those still awaiting exploration results.

Environmental protests against industrial projects have never been so marked as they are today. The influx of investments and the rise of environmental awareness have brought about this phenomenon.

"We shall have to be more zealous in promoting the Philippines as a major investment site," said former President Fidel V. Ramos who, during his term, was the country's foremost salesman, frenziedly travelling to Asian and Western capitals to invite investors. "There is simply no getting around the argument that we need to create new jobs for our people, and that investments bring these jobs."

But environment has to bear the cost. In Davao del Norte, gold mining has been endangering the natural water systems in the nearby provinces. Small-scale miners employ inefficient techniques of ore extraction and metal recovery by using mercury in their operations.

Government monitoring of water in the affected areas reveal high concentration of mercury up to 62 parts per million (ppm) in sediments and 0.0204 ppm in water, which is way above the 0.002 ppm standard set the by the World Health Organisation.

Studies have also indicated that about 100 metric tons of mercury were flushed into the surrounding environment between 1986 and 1989. Seventy-five per cent of the people exposed to mercury for an average of 30 months, or who lived within 500 metres of a source of mercury, show clinical symptoms of poisoning.

Small-scale mining often leads to vegetation loss as hillsides are cleared when miners follow a vein of gold. Forest is also felled to make way for airstrips and working areas. In less than two decades, rampant and unlicensed gold mining and illegal logging have eroded Kematu's hillsides in T'boli, South Cotabato and dried its rivers.

Despite such examples, some Philippine industries are beginning to realise that it is their corporate responsibility to contribute to reversing the worsening condition of the country's environment.

They have been encouraged in this by the Philippine Business for the Environment, Inc. (PBE), a non-profit organisation incorporated in 1992 to assist local companies in dealing with environmental issues and concerns. "We are committed to the principle of sustainable development where economic growth is balanced with environmental responsibility," said PBE in a statement.

One of the chartered members of PBE is San Miguel Corporation (SMC), the largest beverage, food and packaging company in the Philippines. Founded in 1890 as a small brewery, the company and its subsidiaries today generate about four per cent of the country's gross national product and about six per cent of government tax revenues. Its manufacturing operations extend to Hong Kong, China, Indonesia, Vietnam and Taiwan, and its products are exported to 24 countries around the world.

"Care of the environment postulates respect for life and human dignity," said Andres Soriano III, SMC chairman and chief executive officer. "Being the only creature on earth gifted with intelligence, reason and choice, the human

Henrylito Tacio

Left: Recycling toxic waste, Cagayan de Ore, Philippines.
Right: Children fishing in polluted river, Manila, Philippines.
Below: Pollution is a growing threat to the natural environment.

bligation'

being is the rightful steward of the environment, which is man's natural domain. As responsible stewards, we have the moral obligation to care for the environment and preserve its heritage for the next generations."

The SMC adheres to the prevailing environmental laws and regulations governing the particular country where it operates, but concern for the environment transcends mere compliance.

In the Philippines, all major SMC plants are equipped with wastewater treatment facilities. Through this process, water is rid of its effluents and even recycled for irrigation, cleaning and livestock purposes in some areas. In certain plants, the treated water is discharged into a pond where tilapia fish are bred and harvested when mature, as in the SMC Brewery in Granada, Bacolod City.

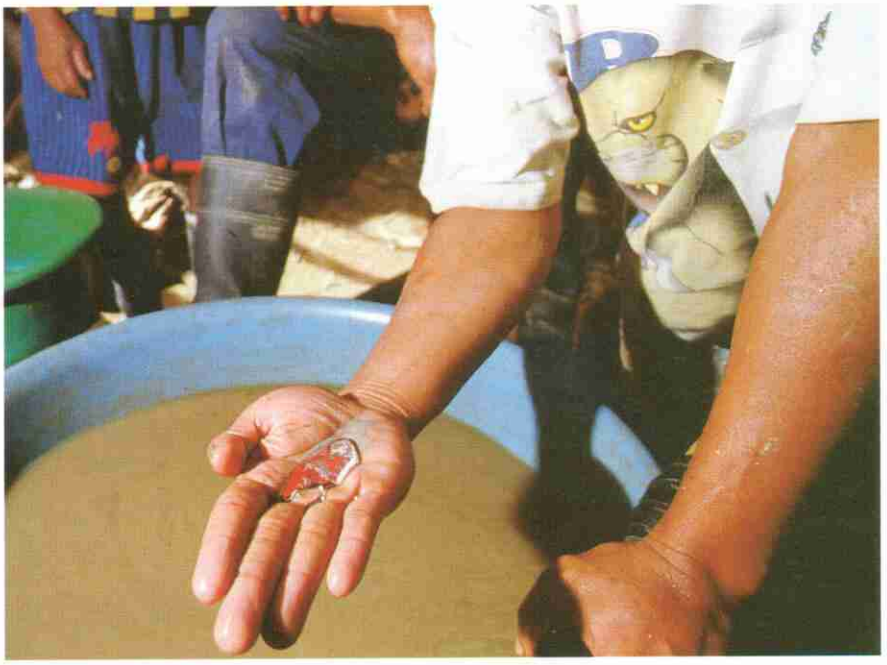
Solid waste in the brewing process does not go to waste. The sludge is used as fertiliser and the spent grain is converted into animal feeds by B-Meg Feeds, a division of San Miguel Foods, Inc.

Waste segregation is practised in SMC plants. Some plants use the colour coding system to determine the different types of waste and into which particular bins they should be discarded.

In Valenzuela, Metro Manila, the SMC's Polo Brewery launched its Clean Air programme in 1993, banning vehicles emitting noxious gases from entering the plant premises. A certification has to be obtained as proof of compliance from the Pollution Control Unit in Metro Manila which, in turn, is presented to Polo Brewery to earn a six-month gate pass. A vehicle undergoes a smoke emission test every six months.

Pollution prevention is a key factor in the operations of San Miguel Packaging Products, which uses whenever practicable, materials, processes and practices that reduce or eliminate the generation of pollutants and wastes at the source. This includes sourcing and use of environmentally preferable materials, efficient use of energy and

Mikkel Ostergaard/Still Pictures



Chris Stowers/Panos Pictures

water, and careful use of conservation of resources.

On the other hand, many industrial firms near the rivers and other bodies of water simply treat the wastes generated in their production processes. This entails the establishment of wastewater treatment facilities for liquid wastes and the installation of devices like electrostatic precipitators for air pollutants. While this strategy admittedly helps in efforts to control industrial pollution, these so-called end-of-pipe treatment processes are very expensive.

As such, many companies are now looking for measures that are much less expensive but effective nonetheless in controlling industrial pollution. This is where the concept of waste minimisation enters. This idea primarily encourages the reduction of wastes right at the source.

By simply installing devices that remove fine particles from its wastewater, the manufacturing plant in Bohol of Philippine Starch Industrial Corporation has significantly reduced the biochemical oxygen demand of its effluent, from a high of 163 mg/L to only 54 mg/L.

New technology, experts say, now make it possible for companies to drastically lessen pollution and keep operations clean.

Despite such efforts, Filipino pessimists believe that the country's environment will continue to deteriorate.

As the country moves towards to industrialisation, arable land has to give way. Trees are cut extensively. Endemic wildlife species vanish into extinction one after the other. Air, particularly in Metro Manila, is grossly polluted. Coastal eco-systems are deteriorating. Mangroves, coral reefs and seagrasses are not spared from depletion.

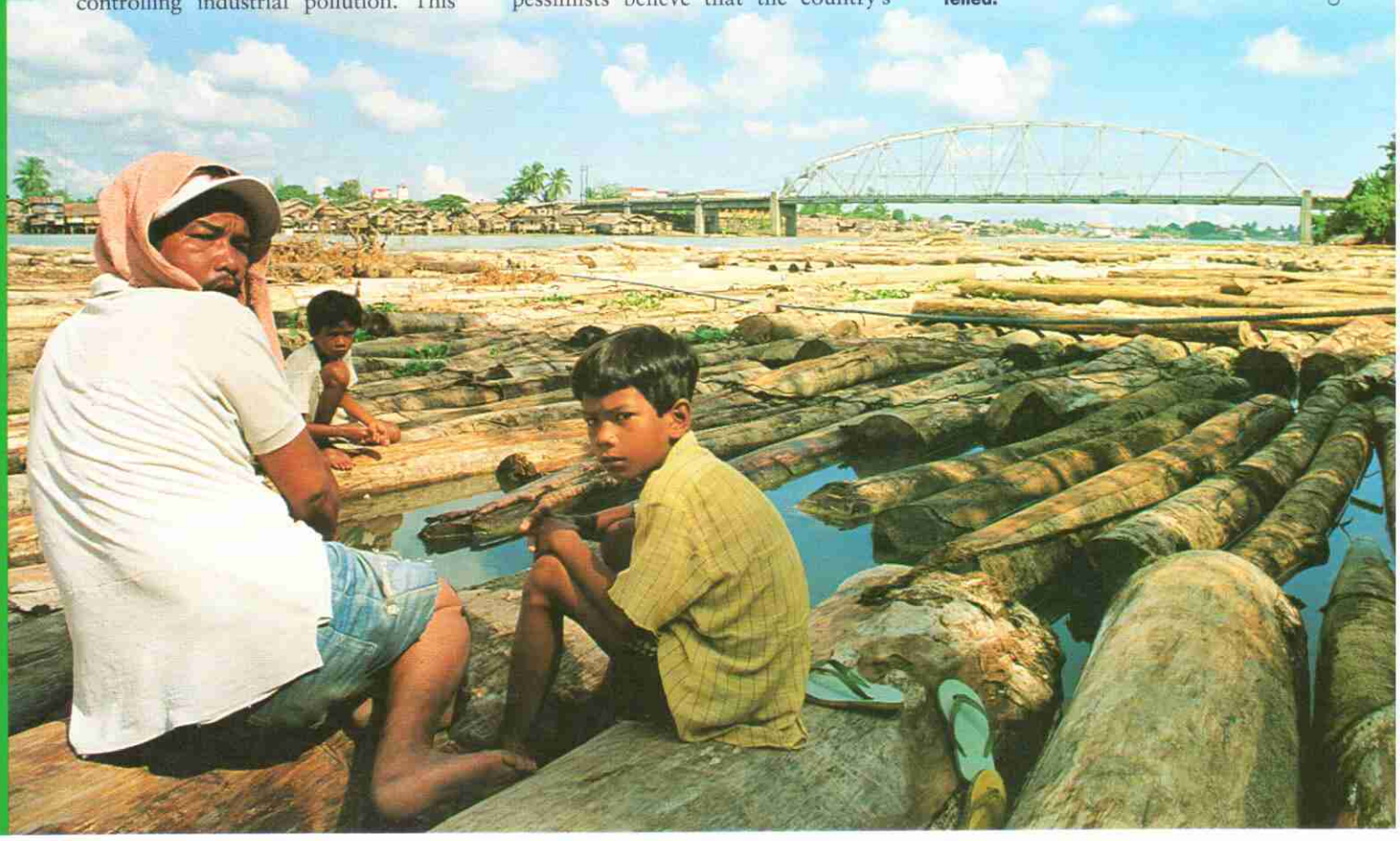
"Pollution levels are still high, poverty is all around," commented Danilo Songco, who heads the largest federation of non-governmental organisations in the Philippines.

But, Nicanor Perlas, one of the principal advocates of sustainable development and a recipient of UNEP's Global 500 Award, believes there's still hope. "If we expect changes in two or five years, we will be disappointing ourselves, but if you look towards the longer-term, I think there is a fighting chance." ■

Henrylito D. Tacio is a five-time recipient of the Science and Technology Journalism Award given by the Philippine Press Institute. He was recently elevated to the Institute's Hall of Fame.

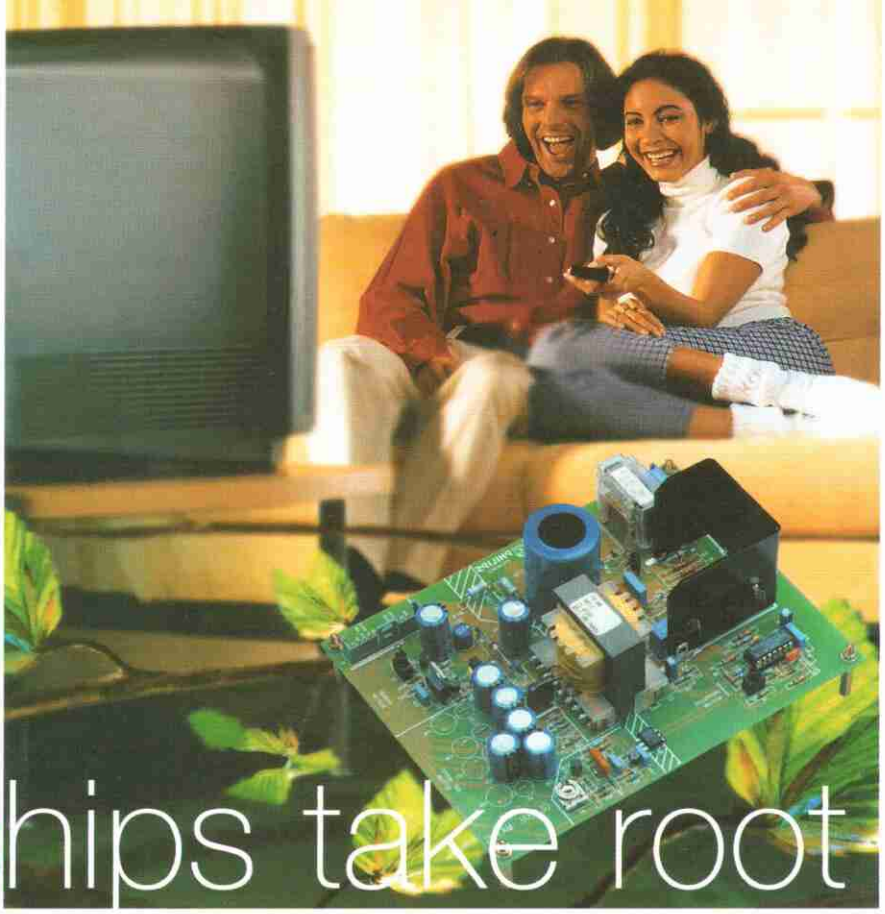
Above: Mercury used in gold mining has polluted rivers in Mindanao, Philippines. Below: As the Philippines moves towards industrialisation trees are extensively felled.

Chris Stowers/Panos Pictures



In the last few years, new patterns of co-operation have been established in The Netherlands between government, industry and the environmental movement. **Jacqueline Cramer** reports.

Green partnerships take root



Philips

Above: Philips Semiconductors' new GreenChip reduces the electricity wasted by TV's and VCRs by up to 99 per cent.

Until recently, direct co-operation between Dutch industry and environmental activists would have been unthinkable, but both are now beginning to work together to achieve specific objectives. The Government is also revising its original, mainly regulatory, role in environmental policy to take on a more orchestrating stance.

These changes have come about as the attitudes of all three parties have matured. Until the mid-1980s Dutch environmental policy focused on laws to control and cure specific pollution problems – involving water, air and soil, as well as noise. The poor results led to action based on a more integrated, preventive approach. Instead of bureaucrats laying down the law, the Government experimented with inter-active decision-making involving all the parties talking together at an early stage.

One example of this is the way decisions are being taken over the expansion of Rotterdam harbour. First a 'need-necessity' debate was organised among all the relevant groups, over the availability of space for the harbour extensions. In a second round of debate, following agreement that there was, indeed, a the shortage of space, the various groups were asked to come up with possible solutions. (Ideas included a new polder in the North Sea, better use of current space in the Rotterdam area, or expansion elsewhere). Various options are now being considered.

Industrial firms, local municipalities as well as environmental and nature conservancy groups all took part. This so-called 'green polder' model of consensus building is comparable with the way Dutch employers' organisations and trade unions make deals about pay and conditions without government intervention.

Since the 1990s, the forerunners in industry have gone beyond mere self-regulation, acting within set environmental guidelines, to embrace the notion that ecology and economy should go hand in hand. Instead of regarding environment as a defensive issue, they are beginning to see it as a business opportunity.

The chemical company Akzo Nobel is one such front runner. It has carried out eight pilot studies to identify promising eco-efficiency improvements in its whole product chain. The most promising have already been adopted, and others are being further investigated. A similar initiative has been taken by Philips, leading to products that are more energy efficient for the user – including television sets – or ones which are easily recyclable.

Other companies, such as the sweets manufacturer Van Melle, have reduced their own consumption of fossil fuel energy by switching to solar power.

Such initiatives have led to changes in attitude by environmentalists, many of whom now see industry as an 'ally' in the battle for sustainable production.

The Netherlands World Wide Fund for Nature (WNF), for example, is co-operating with Unilever to sell fish certified by the Marine Stewardship Council. Because the WNF is seen by industry as a respected organisation firms like Unilever benefit from being associated with it. More radical groups such as Greenpeace and the Dutch Friends of the Earth (FoE), are less ready to co-operate and more inclined to adopt an action-orientated approach.

Dutch FoE, for example, criticised certain chain stores selling tropical forest wood. Some of these then adopted the Forest Stewardship Council certification scheme and were duly praised buy FoE. Similar agreements were made with the potato and bulb producers.

More recently FoE, with financial support from the Government launched a Factor Four initiative. Working with front-runners in industry it hopes to reduce their material consumption. Industry, in turn, can expect to improve its image, reduce its cost and introduce improved products.

Such changes in the behaviour of Government, industry and the environmental movement have resulted in new forms of co-operation. Delicate relationships are being establish whose success depends very much on the views and behaviour of those involved. Despite the inevitable difficulties involved, this is a promising way to elicit the creativity in society needed to make big steps forward towards sustainable development. ■

Jacqueline Cramer is a part-time Professor of Environmental Management at the University of Tilburg and works as an independent consultant for government and industry.

An oil man's conv

Sir John Browne, Group Chief Executive of BP Amoco, is used to taking the long view. His interests include philosophy and the study of pre-Columbian art. His climb up BP's corporate ladder, which took him from 18-year-old Cambridge trainee to the far corners of the earth and the heights of management, took nearly three decades. But since he won the top job, in 1995, the company has grown by leaps and bounds. And, to the puzzlement of some rivals, it has been painted an unlikely shade of green. **John Rowley** reports.

Last year, Sir John Browne shocked the oil industry by negotiating BP's purchase of the American oil giant, Amoco. And earlier this year he led a successful $27 billion take-over bid for America's Atlantic Richfield (ARCO), making BP Amoco the second biggest oil conglomerate in the world.

A former head of BP Exploration, Sir John also oversees a major exploration and development programme around the world, from Venezuela to the Caspian, and from Angola to the remote western fringes of Arctic Alaska. Indeed it was this last $500 million Northstar development which brought Greenpeace and some Alaskan Natives of the Yup'ik and Gwich'in people to BP Amoco's London AGM in April. The company, they claimed, was threatening this wildlife region and would add to global warming if the plan to extract some 150 million barrels of oil from under the Arctic ice went ahead.

Altogether, BP Amoco is investing in long-term exploration and development at a rate of over $7 billion a year, and is heading for an annual turnover of $100 billion – greater than the income of 40 of the world's poorest countries combined.

Less noticed than the company's huge acquisitions, was Sir John's decision in April to spend a relatively modest $45 million to win a controlling interest in Solarex. This made BP Amoco the world's biggest solar energy company, with a total investment in solar of some $150 million. This was followed by the launch of a programme to power 200 BP Amoco petrol stations worldwide, including all new service stations in seven European countries and Japan, with solar panels. This will take place over the next two years, with more to follow.

This, Sir John made clear, was only the start of what he hoped would grow into a billion dollar business within a decade. It was also evidence, he said, of the company's commitment to reduce its own emissions of greenhouse gases by at least 10 per cent from its 1990 base, by 2010. Already, he says, these emissions have fallen by 5 per cent since 1996.

Pirate or pioneer?

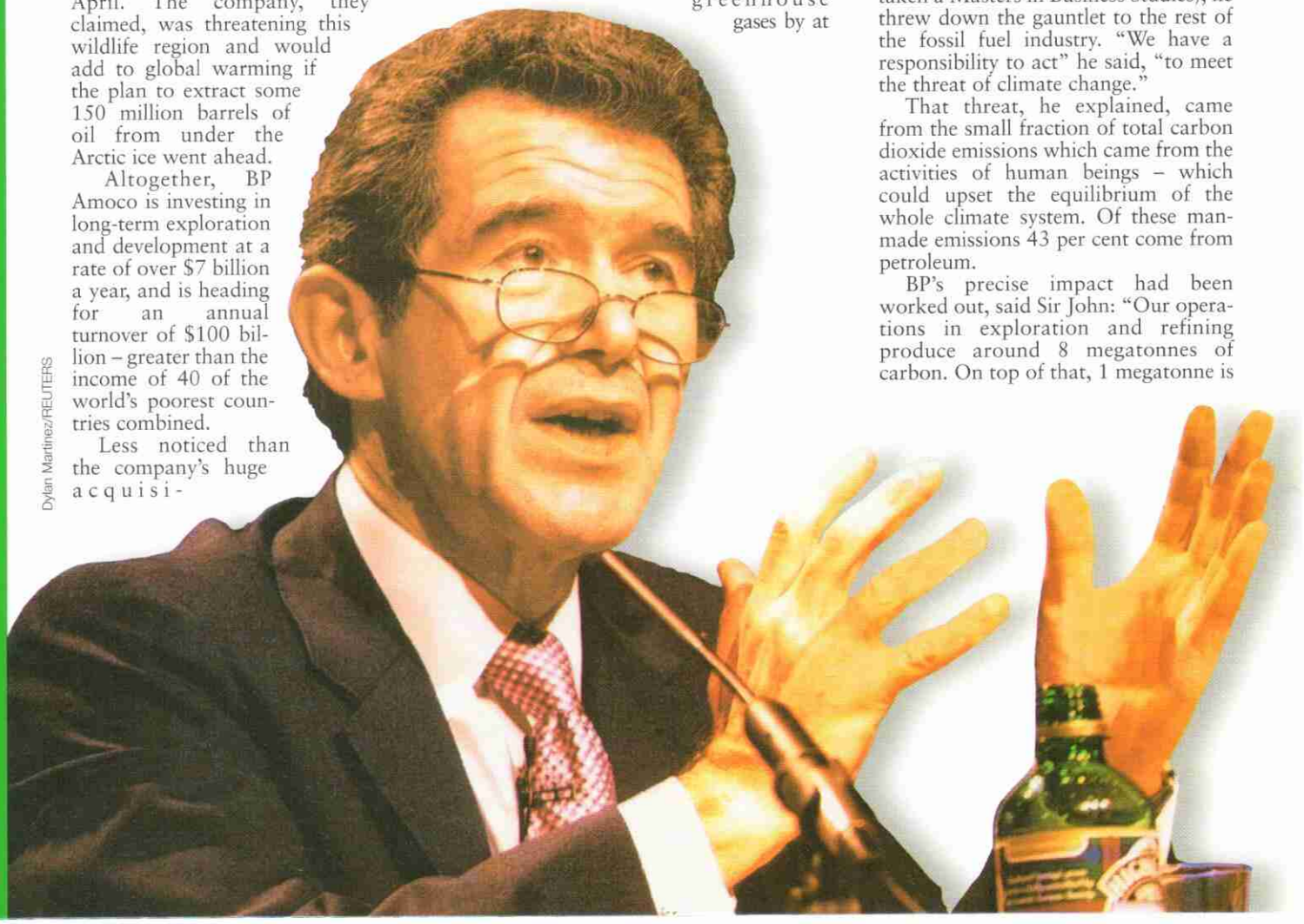
So what is going on? Does Sir John represent the much feared face of corporate gigantism, gobbling up rivals, cost cutting and downsizing staff, while exploiting ever-more marginal oil fields in sensitive environments? Or is he a pioneer of the renewable energy revolution, with a dual concern for social responsibility and the environment?

He, himself, has gone out of his way to answer at least some of these questions.

Most outspoken have been his views on global warming. Speaking, in May 1997, at Stanford University in California (where years before he had taken a Masters in Business Studies), he threw down the gauntlet to the rest of the fossil fuel industry. "We have a responsibility to act" he said, "to meet the threat of climate change."

That threat, he explained, came from the small fraction of total carbon dioxide emissions which came from the activities of human beings – which could upset the equilibrium of the whole climate system. Of these man-made emissions 43 per cent come from petroleum.

BP's precise impact had been worked out, said Sir John: "Our operations in exploration and refining produce around 8 megatonnes of carbon. On top of that, 1 megatonne is



Dylan Martinez/REUTERS

ersion

produced by our chemical operations. If you add to that the carbon produced by the consumption of the products we produce, the total goes up to around 95 megatonnes." That was just one per cent of the total carbon dioxide emissions which come from all human activity.

"As a company, our contribution is small, and our actions alone cannot resolve the problem. But that does not mean we should do nothing." BP, he promised, would control its own emissions, fund continued research, transfer benign technology, work with partners on the problem, develop alternative fuels and contribute to the policy debate.

As evidence of that intent BP Amoco has developed an internal emissions trading system to help reduce its emissions of greenhouse gases and is working to reduce the levels of sulphur in the fuels it produces. It has joined the World Bank in testing out the idea of a carbon-offset fund and has gone into partnership with the Nature Conservancy and others to conserve 1.5 million hectares of forest in the Santa Cruz province of Bolivia.

A few months after the Stanford speech, Sir John spelt out his concerns even more clearly in an address to the German parliament in Berlin. "What I said (at Stanford) surprised some people, but they shouldn't have been surprised.Corporate leadership in the energy industry and elsewhere requires realism. We need to face the facts if our actions are to be properly considered."

"If you want a prediction from me, it's that we'll evolve from a world of hydrocarbon dependency to a mixture of hydrocarbon and alternative energies use. Vast quantities of liquid hydrocarbons (oil and gas) will be left behind in the ground, just as solid hydrocarbons (coal) are being left behind today."

Dr Chris Gibson-Smith, Managing Director, Policies and Regions, BP, to the University of Cambridge Engineers' Association Conference, September 1998.

Growing Population

But if one of those facts is the need to protect the environment by better technology and better management, another was the growing demand for energy. "With the growth of global population and standards of living, demand for energy will continue to rise. By 2010 the world's population will have increased by around 1.3 billion." As a result, the general consensus was that by 2010 total energy demand will rise by more than 30 per cent – an extra 2.5 to 3 billion tonnes a year of oil equivalent – equal to twice Europe's current consumption.

"The world already uses almost 73 million barrels of oil a day – 16 per cent more than it did 10 years ago. In another 10 years, because of the growth of population and prosperity, that figure is likely to be over 85 million barrels a day, and that is a cautious estimate."

Renewable energy was part of the answer, he said. "By 2020 we believe up to five per cent of world energy could be supplied by renewable energies, including solar power. Within 50 years it could be as much as half." But in the meantime "the world needs oil and gas, in growing volumes" and it could be done, he believed "without destructive consequences."

"Business is not a monster, but actually a highly responsible and creative element of society which can help solve many of the problems the world faces."

Sir John Browne, in a speech to the Annual Conference of Business for Social Responsibility, November 1998.

It is a case Sir John often reiterates: "We believe we can set an example in doing that, not just by reducing carbon dioxide emissions, but also by improving fuel quality – reducing sulphur and raising air quality in the cities..." Within two years, he says, the company intends to make new clean fuels (unleaded, with reduced benzene and very low levels of sulphur) available in 40 cities worldwide. He also instances the way BP Amoco is phasing out the flaring of excess gas when new oil fields are started up and the $100 million investment in the terminal at Grangemouth in Scotland to take out volatile organic compounds as tankers are loaded with oil.

He stresses too, the company's community investments around the world. "We have learnt from our mistakes that we can't stand aside from the problems of the communities in which we work." He gives as an example the self-build housing and other community projects in the Casanare region of Colombia where BP had at one time come under fire for its environmental and human rights record. Then there is the financing of forest replanting around the Black Sea after fires had destroyed them, the supply of solar powered refrigerators to help doctors store anti-malarial vaccine in Zambia, and help with the development of small businesses in Soweto in South Africa.

All this environmental and social concern could just be part of an effort to improve an oilman's image, but one senses that Sir John has been impressed by the science and by public concern about the future ever since the Rio Earth Summit in 1992. He does, no doubt, speak from the heart when he says "We simply cannot survive for long if we remain so out of tune with our consumers' perceptions and the next generation's attitudes."

Dramatic changes

But he has still to persuade some Alaskan people that their homeland will be safe from 'big oil'. As one of them told this year's AGM: "For countless generations the Gwich'in people, my people, have relied on the land to provide for our survival. Already we are witnessing dramatic changes in our Alaskan climate from the burning of fossil fuels, and an oil spill on the North Slope would effectively destroy our abundant wildlife and our native cultures in the process." Greenpeace also points out that work on the pipeline has been held up for another year because the US Fish and Wildlife Service want a further review of the possible dangers to wildlife.

BP Amoco's response is to point to the long discussions with the North Slope communities and the final approval of the project by the local authority representing all native groups, the Alaskan State and all regulating groups. The final federal permit came after approval by the US Army Corps of Engineers in May and work is now due to begin next winter.

Sir John Browne takes a broader view of such exploration and development. "I know there are some people who sincerely believe that we shouldn't be producing oil and gas at all...I don't think we will agree on that fundamental issue. The world needs oil and gas – and no amount of investment in renewable energy can alter that fact in the immediate future...

"In the meantime we're determined to give the public a choice – to show that hydrocarbons can be produced without causing environmental damage...that's why we wouldn't endorse any project which we believed would threaten the environment of any part of the world."

The people of Alaska, and elsewhere, will see if he is proved right. ■

The Great Debate:

Can corporations

Yes **says Peter Knight**

I've met many crooks, megalomaniacs and backstabbers in my life and most of them worked for environmental campaign groups.

Skulduggery is by no means the exclusive preserve of multinationals, although it is easy to cast these large companies as the global bogeypersons: rapers of the seas, pillagers of genetic data and destroyers of diversity. This characterisation, so loved by the Greens and all those who believe *The Ecologist*, satisfies our need to blame something much bigger than ourselves – the hairy giant who lives in the dark wood and eats our store of unmodified corn in the dead of night.

My argument is that it is the giants, both bald and hirsute, who offer us hope as we tumble towards a complex and potentially chaotic new millennium. Let's hear it for the well-hung!

Big companies, as with any other groups and organisations, are made up of people: the fine, the mediocre, the smelly and the bloody awful. This is why multinational companies can be good, boring or bad – but not necessarily so.

Instead of posing a threat to sustainable development, I believe they will be our saviours in the pressure-cooker world that awaits our children. This is because big companies have long-term outlooks and are therefore far more conscious of the future than small concerns, or governments for that matter.

Furthermore, big companies have a far greater interest in being responsible than mom and pop operations because they have a much wider constituency to satisfy – their stakeholders, from shareholders to the local community that gives them a licence to operate.

Compare, for example, the environmental performance of small and large companies and you'll find the minnows are cavalier, buccaneering and much more messy than the monsters. This is because small organisations have fewer stakeholders to answer to, are constantly facing bankruptcy and consequently have much shorter time horizons. For the small and medium sized enterprises it is much easier to hire some dodgy trucker to dump the muck in a nearby hole than it is to dispose of waste responsibly. Look at the recent cases for illegal dumping of asbestos waste – and the use of children to strip the stuff unprotected – and you'll find it's the small companies who are to blame.

Small companies can duck and dive almost immune to the public gaze. Big concerns, on the other hand, are easily identified (and easily vilified – just check the web for all manner of allegations). Consider too the targets chosen by campaign groups, such as Greenpeace. They always go for the big names, preferably with well-known brands, because these companies have much more to lose, and the campaigners a greater chance of winning. Multinationals depend on a good reputation and will defend their public image at all cost.

This does not mean that global companies are necessarily nice, cuddly things. They, like small companies, governments, mothers and fathers, have to make tough decisions in a harsh world. This might mean shifting production to where labour is cheaper, or where regulations are lax. The pressures of globalisation – including the way countries compete for the favours of multinationals – make these decisions ever more common, if no more palatable.

This is difficult ground to defend, especially where communities are torn apart or left with no means of income because the factory has been flat-packed and shipped off to where people smelt iron in sandals. But is there an alternative? The Soviet system, which was supposed to solve these sorts of problems, failed hopelessly. Localised economies – and everything that makes up the Schumacher fantasy – might excite those who enjoy recreating medieval life. But given the global nature of the world's economy and the ever-rising aspirations and expectations of a fast growing populations, it seems highly unlikely that democracies would want to turn the clock back a few hundred years and join North Korea at its banquet of poverty.

Somebody, some entities, are going to have to generate wealth – create the jobs – if my child and his children are going to live healthy, happy lives. For me, hope lies in companies with core values that reflect those of the broader society. These companies – and any megalomaniacs that might lurk in their boardrooms – are held in check by their commitment to live up to their values. And – and this is important – by an

be trusted?

ever-vigilant, well-informed public who scrutinise corporate behaviour and threaten to remove the licence to operate unless companies act responsibly. In this way corporate decisions will be taken within a framework of obligation to a broad range of stakeholders.

There also needs to be the necessary frameworks – delivered by government and enforced by the rule of law – that ensures multinationals are open and transparent in their behaviour and fulfil social responsibilities that reflect their economic freedoms.

Those who believe that simply by limiting the freedom of global companies and banning the global flow of capital we can all live kissy-kissy lives are at best naive, or have smoked too many aromatic herbs. We live in a global economy, with global companies and we must make the system work for our benefit. This is our reality. It works, certainly better than anything else we have tried, and we should get on with improving it.

My criticism of multinationals is that they are far too nice, especially to their own. Big companies are in many ways the last bastions of socialism, doling out company cars, subsidised food in canteens (which reduces opportunities for small catering companies), large pensions and fat bonuses. Such benefits should be more evenly spread among the stakeholders – that's you and me included. Come to think of it, why aren't I working for a multinational? ■

Peter Knight is a co-director of Environmental Context, a small consultancy that advises business on sustainable development. He is a former winner of the UK's Environmental Journalist of the Year and a regular contributor to the *Financial Times*. He writes a regular column in *Tomorrow* magazine.

Nike Corporation

No says David Korten

Over the past twenty years we have seen a dramatic shift in power from national governments to global corporations. Now we are waking up to the fact that our largest corporations command internal economies larger than those of the majority of countries. They are reshaping our culture through saturation advertising and their control of the mass media. And they dominate our political processes through their use of the media to shape national dialogue and political contributions to buy the loyalty of politicians. For all practical purposes most of the world is now ruled by publicly traded corporations and the global financial markets to which they owe their allegiance.

At the same time we find our world beset by an increasingly serious array of interrelated problems, including rapidly growing inequality and an accelerating destruction of the life support systems of the planet. What to do? Since corporations hold the power, there is a certain logic in turning to them for solutions.

In doing so, however, we confront a problem. Corporate culture and the corporate legal structure render the corporation blind to all considerations other than its financial bottom line. We thus set out on a valiant mission to convince both corporations, and perhaps ourselves, that social and environmental responsibility will be profitable – hoping and praying that it is true.

Past experience points to a contrary reality. Ralph Estes, author of *Tyranny of the Bottom Line: Why Corporations Make Good People Do Bad Things*, compiled an inventory of studies estimating the costs that corporations externalise onto the public in the United States each year in the form of such things as defective or dangerous products, environmental damage and workplace hazards. He came up with a total of $2.7 trillion a year, roughly five times corporate profits and 37 per cent of US GDP in the base year of 1994.[1] The truth is that, at least in the aggregate, corporations are extremely inefficient institutions whose profitability depends on passing massive externalised costs onto the public. While the problems may not yet be so extreme in Europe, the norms and structures of US-style capitalism are rapidly infecting the European economy.

Yes, we have an inspiring and widely cited example of a mid-sized corporation

run by a principled and visionary CEO with a total commitment to environmental responsibility. Its name is Interface. While rightly lauded by environmentalists, it hasn't impressed the financial markets. From April 1998 to April 1999, a period in which most stock indices made substantial gains, Interface shares lost more than half their value.

The fact that under enormous citizen pressures Shell corporation, with its abysmal environmental and human rights record, and Nike corporation, which built its corporate strategy from the day of its founding on the use of cheap sweat shop labour, have launched major public relations campaigns touting themselves as environmental and human rights champions should not lull us into false hopes. It is standard operating procedure for large corporations to use sophisticated and well financed public relations campaigns to cover over misdeeds with caring images even as they work to further weaken regulatory restraints. This is well documented in books such as William

Greider, *Who Will Tell the People*; Murray Dobbin, *The Myth of the Good Corporate Citizen*; Sharon Beder, *Global Spin*; Jed Greer and Kenny Bruno, *Greenwash* and John Stauber and Sheldon Rampton *Toxic Sludge is Good for You!*

Environmental business journalist Carl Frankel reports in *In Earth's Company* on his effort to identify individuals who were true environmental champions working within large US and Canadian corporations. He found three and all had been fired before he completed the book.

Paul Hawken, a former corporate CEO and founder of The Natural Step USA, has for years sought to educate corporation executives about their environmental responsibility. He reports that "The number who are truly receptive can be counted on one hand. I am constantly confronted with scepticism and resistance."[2]

Robert Monks, a political conservative, successful investment fund manager, and leading authority on corporate governance, reminds us of an obvious truth: "Corporations are not people; they have no conscience. Although corporate acts are carried out by individuals, even individuals with high moral standards often find themselves caught up in a corporate action that is beyond their control – or even, in some cases, their knowledge."[3]

Monks points out that even corporate decisions as to whether to obey the law are usually based on a purely financial cost/benefit calculation: "The corporation in effect asks whether the costs of disobedience – discounted by the probability of being discovered, prosecuted, and fined (there is almost no risk of jail) – equal the costs of compliance."

For evidence that corporate lawlessness has become pervasive you need only frequent the pages of *The Wall Street Journal* or the business section of *The New York Times*. Marjorie Kelly, the editor of *Business Ethics* newsletter, for years sought out and publicised what she believed to be positive examples of good corporate citizenship. She found so few of the supposed positive examples held up under scrutiny that the newsletter is now devoted largely to publicising corporate wrong doing.

We should assume that in most instances corporations are going to do what they are required to do by both law and financial markets – focus on the financial bottom line. We should further expect that if they do not, the financial markets will discipline them by trashing their stocks, voting in new management and/or making them the target of a hostile takeover.

Moving to a sustainable relationship with the planet will require a basic rethinking of how we live. When exactly should we expect Shell corporation to announce that it is organising a coalition of petroleum, automobile, and agribusiness companies to work for a radical reduction in our dependence on automobiles, fossil fuels, and toxic agricultural chemicals? When should we expect Nike corporation to announce that henceforth its shoe factories in Indonesia will be converted to producing low cost footwear the average Indonesian can afford and that all shoes that it sells in the United States will be made exclusively in the United States in factories paying union scale? These would obviously be unrealistic expectations, the equivalent of corporate suicide, and would surely cost the CEO his job.

While waiting for divine intervention to make responsibility profitable, we might ask some basic questions. For example: Was there some global referendum in which we collectively decided to transfer control over the decisions fundamental to our well-being and quality of life from democratically elected public officials to global financial markets and mega-corporations? Do the accountability structures of the corporation suit it to fairly balancing out the many conflicting interests at play in any human society, such as choosing between short-term corporate profit and long-term environmental sustainability? Do corporate CEOs have some special wisdom, training, or right to make such judgements on our behalf?

That the answer in each instance is clearly "No" suggests that giving up on democracy and anointing corporate CEOs as the modern equivalent of the benevolent absolute monarch is not a good idea. Instead we should be working to rebuild the institutions of democracy and dismantle the instruments of unaccountable corporate power, as we put in place regulatory and tax policies that make irresponsible behaviour prohibitively expensive. This will require serious measures to radically reform political campaign financing, break-up large corporations into human-scale units, limit ownership to real stakeholders such as workers, managers, customers, suppliers, and community members who have more than a purely financial interest in the firm's assets, and rewrite corporate law to eliminate the legal fiction of corporate personhood.

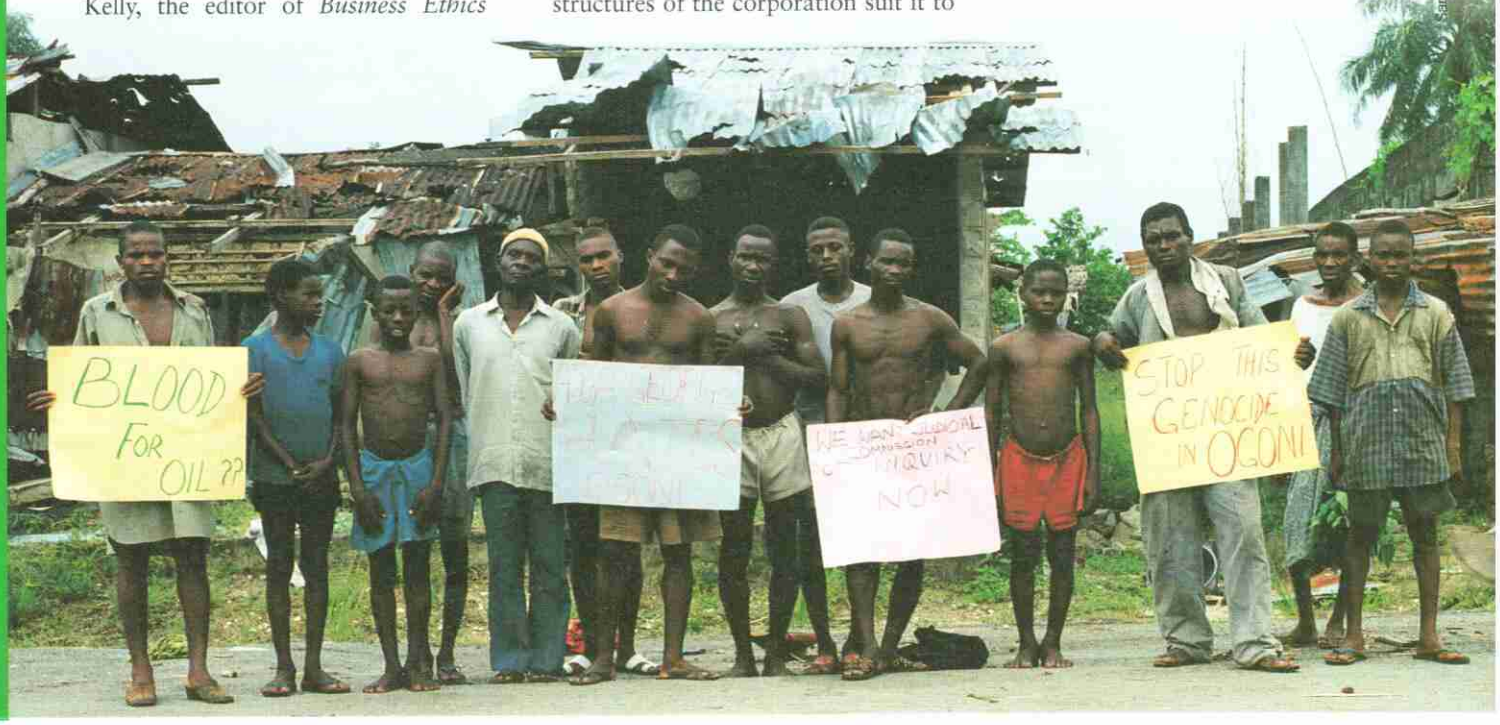
Of course, the full power of the corporation's financial, political, and media resources is mobilised to kill such needed reforms. Freedom and democracy for ordinary people have never been easily won. ■

Dr David C. Korten is author of the best-selling *When Corporations Rule the World* and the more recent *The Post Corporate World: Life After Capitalism* (reviewed on page 31). He is board chair of the US-based Positive Futures Network and founder and President of The People-Centred Development Forum.

1. San Francisco: Berrett-Koehler Publishers, 1996.

2. *A Dialogue on Corporate Responsibility* with Paul Hawken and David Korten, *Yes! A Journal of Positive Futures*, Summer 1999.

3. Robert A. G. Monks, *The Emperor's Nightingale: Restoring the Integrity of the Corporation in the Age of Shareholder Activism* (Addison-Wesley, 1988).



Sarah Leigh-Lewis/Panos Pictures

Gadfly by Norman Myers

Why is industry so often blind?

Way back in the mid-1970s, the American corporation 3M – the folks who bring you scotch tape and lots of other office supplies – started a Pollution Prevention Program. Since that time their recycling and waste-management efforts have saved the company a cool $850 million. Key question: why haven't other businesses in that field been rushing to copy 3M's success? Is it that private enterprise can sometimes be rather unenterprising?

Instead of inveighing against the foibles and failings of the world, Gadfly this time prefers to relay some instances of "good news" items, and with reference to what is becoming known in the trade as Industrial Ecology. Reader: while noting these breakthroughs, keep asking yourself why there aren't wall-to-wall efforts by businesses worldwide to play copy cat. Don't they like money? As Amory Lovins puts it: Businesses sometimes behave like those people who ignore a $100 note lying on the pavement, on the grounds that if it were real, someone else would have picked it up already.

Fortunately a few firms are seeing the light. The Norwegian construction company Kvaerner finds that a one-per cent reduction in consumption of raw materials and energy is worth $6 million per year. Bristol-Myers Squibb Co. claims that the economic benefits of pollution prevention exceed costs four-fold. Xerox Corporation now takes used machines back from customers in order to scavenge them for parts; the corporation recycles more than one million parts a year, saving at least $100 million and reducing landfill waste by over 1000 tonnes.

Much the same applies to energy conservation. The Energy Star Program in the United States sets efficiency standards that enable televisions and videos to reduce by 75 per cent the energy used in standby mode, which currently costs Americans more than $1 billion a year.

Some enlightened businesses are aiming for the ultimate in pollutants and wastes: zero emissions. The key is to set up clusters of industries where the waste of one becomes a resource for another. There are success stories along these lines in Sweden, Denmark, Colombia, Namibia, Kenya and Fiji. The Ebara Corporation in Japan and DuPont in the United States are committed to zero waste, while the Asahi Beer Company near Tokyo already recycles 98.5 per cent of its raw materials.

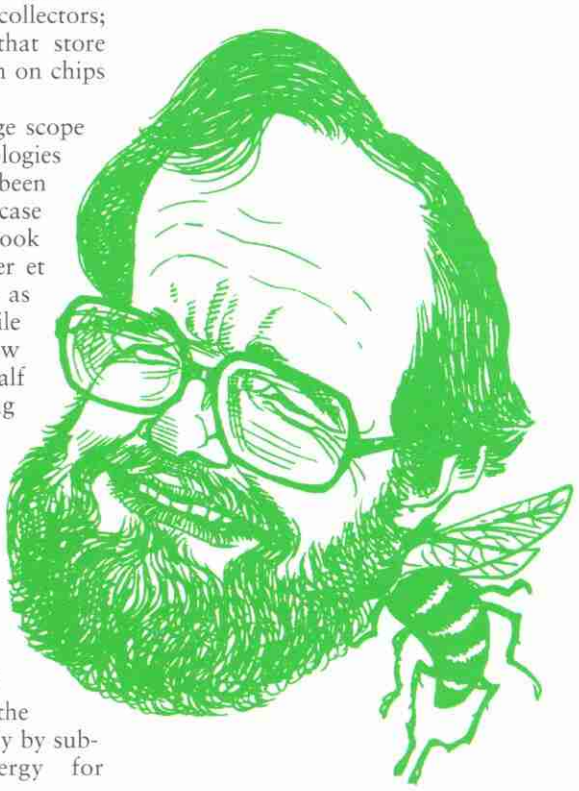
As Paul Hawken and the Lovinses point out in their forthcoming book *Natural Capitalism*, we can look forward to a host of technological advances that will supply efficiencies of myriad sorts in both the materials and energy fields. For instance, diodes that emit light for 20 years without bulbs; ultrasound washing machines that use no water, heat or soap; hyper-light materials stronger than steel; deprintable and reprintable paper; plastics that are both reusable and compostible; roofs and roads that do double duty as solar energy collectors; quantum semi-conductors that store vast amounts of information on chips no bigger than a dot.

Better still, there is a huge scope for savings using eco-technologies available right now. As has been demonstrated through 50 case studies in the splendid book *Factor Four* (von Weizsacker et al.), we could enjoy twice as much material wellbeing while using only half as many raw materials and causing only half as much pollution among other forms of waste. According to OECD and several governments looking still further ahead, Factor Ten could be on the horizon, which should not be so unlikely as it may sound. After all, labour productivity has expanded by a factor of around 20 since the start of the Industrial Revolution, usually by substituting commercial energy for human muscle.

Alas, it can take a remarkable time for techno-breakthroughs to reach the public square. Consider the time taken for new technologies to reach one quarter of the US population: electricity 46 years; the telephone 35 years; radio 22 years; television 26 years; the microwave oven 30 years; the personal computer 16 years; the mobile phone 13 years; and the World Wide Web 7 years.

Perhaps the real snafu lies with our proclivity to tackle symptoms rather than sources of problems. The problem with the Titanic was that it sank. Some people would propose that more crew should have worked with more water pumps. Others would view this as so difficult that it would have been easier to lower the Atlantic. Of course the best response would have been to re-design the ship in the first place. ■

Dr Norman Myers is a Fellow at Green College, Oxford, and a Contributing Editor of *People & the Planet*.



Associates' news

MERCY MISSION

IPPF

A petition by the International Planned Parenthood Federation to highlight the plight of Min Min Lama, a 14-year-old Nepali girl in prison for terminating a pregnancy after she was raped by a family relative when she was just 12, has resulted in the recommended prison release by His Majesty King Birendra Bir Bikram Shah Dev, *writes Maya Pastakia*. King Birendra has sent a request to Nepal's Chief Justice for the girl's release and such a request is invariably granted in Nepal.

Min Min Lama is currently serving a 20-year prison sentence. The rapist was charged but soon released and now remains free.

Min Min Lama's case is just the tip of the iceberg in Nepal due to the country's harsh abortion law which states that any act of abortion is punishable by imprisonment. The law does not allow exceptions even in cases of rape, incest and life-threatening situations and simply classifies abortion as infanticide. As a result of current law, approximately 37 per cent of the women in prison are there for abortion.

According to Dr Indira Kapoor, IPPF's Regional Director of South Asia, who recently visited the girl in prison in March, "no family member has visited Min Min Lama since the start of her prison term."

As is often the case in Nepal, women who have been in prison for abortion or have suffered rape are shunned by their families and community and are unable to make a living and forced into prostitution. Dr Kapoor stresses that in light of Min Min Lama's imminent release, a rehabilitation strategy is being planned with the help of the Family Planning Association of Nepal (FPAN). Min Min will be placed with a family and her education will continue.

Min Min Lama's story is referred to in the film, *For the Sake of Our Women*, produced by IPPF South Asia Region and the Family Planning Association of Nepal, to raise awareness of Nepal's anti-abortion laws. The FPAN has been working since 1994 to change existing law and to get through parliament the Pregnancy Protection Bill favouring the legalisation of abortion which has languished in parliament for over two years.

To obtain a copy of the film, contact: South Asia Regional Office, IPPF, Regents College, Inner Circle, Regents Park, London, NW1 4NS. Tel: + 44 (0)171 487 7900, Fax: +44 (0)171 4877 7970.

• According to a new World Health Organisation report, *Abortion in the Developing World*, 20 million unsafe abortions are performed worldwide each year, 90 per cent of them in developing countries. This results in the death of 70,000 women and a much greater lifetime toll of injury and ill health.

VATICAN UNDER FIRE

Moves to end the Vatican's observer status at the United Nations were given added impetus earlier this year when a senior Vatican official attacked the provision of emergency contraception to rape victims in Kosovo.

Writing in the Italian Roman Catholic daily newspaper *Avvenire* in April, Monsignor Elio Sgreccia, Vice President of the Pontifical Academy of Life said that use of the "morning after" pill by rape victims in Kosovo was tantamount to abortion.

Alex Marshall, a spokesman for UNFPA, commenting on the Vatican's position, said that its provision of emergency reproductive health kits for about 350,000 Kosovan refugees had nothing to do with abortions. "To drag the abortion debate into this is inhuman," said Marshall.

IPPF, along with the US-based Catholics for a Free Choice and other NGOs, is calling for a review of the Vatican's observer status at the United Nations.

The Vatican was also in the firing line at the UN General Assembly meeting in July, called to consider progress in carrying forward the Plan of Action of the 1994 Cairo Conference on Population and Development. It, and a very small group of countries from Latin America and the Arab World, attempted to revise references to the human rights of women, safe abortion and adolescent health education and services. Finally, however, the recommendations agreed at the meeting were "very progressive", according to Dr Nafis Sadik, Executive Director of UNFPA.

The document sets out specific benchmarks to reduce illiteracy of women and girls, maternal mortality and young people's vulnerability to HIV/AIDS and to provide safe and effective family planning services. It reaffirms the human rights context for sexual and reproductive health. And it calls for specific measures to ensure safe and accessible abortion. There was, unfortunately, no indication that the shortfall in funding for the Plan agreed in Cairo will be made good by the donor countries.

CONDOM CRISIS

Condom use around the world must triple from the 6 to 9 billion condoms a year to 24 billion to help stop the spread of HIV/AIDS and other sexually transmitted infections (STIs), warns a new report by the Johns Hopkins School of Public Health.

"Narrowing the gap between condom need and use is a major public health challenge," say Hopkins researchers in the report *Closing the Condom Gap*.

Worldwide, at least 33 million people are living with HIV/AIDS and another 14 million have died. An estimated 16,000 new HIV infections occur every day. Each year some 333 million new cases of other STIs occur in adults, says the report.

Many of these HIV/AIDS cases and other STIs could be prevented if people used condoms correctly and consistently. As the report notes, "Laboratory tests show that no STI, including HIV, can penetrate an intact latex condom."

One of the reasons why more people don't use condoms is that "family planning programs usually focus on the contraceptive needs of married women, while much of the need for condoms is to prevent HIV/AIDS and other STIs among unmarried people, particularly youth," say the reports authors.

Hopkins researchers estimate that 71 per cent of condom need is among sexually active unmarried men. The remaining need is for use by married men who have extramarital affairs and for use by married couples.

"Making condoms more accessible, lowering their cost, promoting them more, and helping to overcome social and personal obstacles to their use would save many lives and reduce the enormous consequences and costs of STIs and unintended pregnancies," the authors stress.

Contact: Stephen Goldstein, Johns Hopkins Center for Communication Programs, 111 Market Place, Suite 310, Baltimore, Maryland 21202, USA.
Tel: (+1 410) 659-6300,
Fax: (+1 410) 659-6266,
Email PopRepts@jhuccp.org.
A full-text version of *Closing the Condom Gap* can be found at JHU/CCP's web site: http://www.jhuccp.org

WATER CAMPAIGN

WWF has launched a *Living Waters Campaign* aimed at ensuring that people and nature benefit from adequate water resources now and in the future The campaign was launched in May in response to findings that show a stark decline in the world's freshwater systems, habitats and species.

Half of the current available freshwater is already being used. With economic development and increasing population pressure, the situation could worsen for 1.3 billion already-affected people worldwide.

Launched on the fourth day of the 7th meeting of the Conference of Parties to the Convention on Wetlands (Ramsar 1971), the campaign seeks to take actions to avert global water shortage, and conserve the species and ecological services offered by the world's rivers and lakes, springs, marshes and ponds.

When concerns over potential budget cuts brewed at the Ramsar meeting, WWF announced ambitious plans and funding to increase the protected wetlands worldwide. In addition to making some small grants for the improvement of current wetland sites, the campaign aims to conserve 25 million hectares of protected areas worldwide – about one-third of the hectares protected since the beginning of Ramsar 28 years ago.

The campaign will take conservation action in catchment areas such as the Orinoco River Basin where water collects before flowing into major water bodies. Some ways of implementing these targets will be through local-level fisheries management; restoration of wetlands that were once lost; and ensuring the natural functions of existing wetlands.

Contact: Olivier van Bogaert, Conservation News Service, WWF International, Avenue du Mont Blanc, CH-1196 Gland, Switzerland.
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Email: ovanbogaert@wwfnet.org

LESSONS LEARNED

Pathfinder International has published two reports on projects which it has supported in Uganda and Indonesia, which will be of interest to governments and agencies involved in similar activities, there or elsewhere.

In Uganda it is working with a Family Life Education Project, which has grown into a big health care NGO which has become a model for how influential a small NGO can be in a rural setting. Perhaps its greatest achievement, says this report, is the way the project has helped attitudes towards family planning to change for the better. Less certain is the long-term viability of the project once USAID support is withdrawn in 2003.

That agency, in particular, should develop, or return to, "a more holistic and long-term approach to reproductive health program development" rather than the present narrow quantitative definition, the report concludes.

The second report is a mid-term review of a Service Delivery Expansion programme in Indonesia, from 1994-97. One of its key findings is that while the remit of the Government's BKKBN programme has grown it has devoted less time to family planning. It would like to see BKKBN's resources expanded to meet its broader responsibilities – not a very likely prospect under present economic circumstances.

These reports are available from Pathfinder International, 9 Galen Street, Suite 217, Watertown, MA, USA.
Tel: (+1 617) 924 7200, Fax: (+1 617) 924 7200,
Email: information@pathfinder.org
or visit the website: www.pathfind.org

CALL TO BAN DDT

There is now sufficient scientific evidence of hazards to human health and wildlife to justify a global ban on the production of DDT, says a new report by the World Wide Fund for Nature (WWF).

Although banned decades ago in North America because of its links to wildlife declines (such as the near extinction of the bald eagle) and possible risk to human health, DDT is still used to control mosquitoes and other disease-carrying insects in many developing nations.

The report, *Hazards and Exposures Associated with DDT and Synthetic Pyrethroids Used for Vector Control*, dramatically illustrates the persistence and pervasiveness of chemicals such as DDT, which can be sprayed in a village in Africa and end up in the fat of polar bears in the Arctic.

Some of the more recent scientific findings summarised in the report include damage to the developing brain, causing hypersensitivity, behavioural abnormalities and reduced neural signal transmission and suppression of the immune system resulting in slower response to infections. Investigations in Mexico and South Africa reveal that human breast milk contains DDE (the breakdown product of DDT) at concentrations that exceed the acceptable guidelines set by the World Health Organisation.

The report notes that most of the millions of tons of DDT that have been produced in the past remain in soil and continue to be redistributed throughout the environment. For example, an Oregon orchard in the United States still had 40 per cent of the original DDT used 20 years later. Although more than 20 years have passed since it was last used in many countries such as the US, Cotton Belt soils are estimated to still release 110 tonnes of DDT and its metabolics annually into the atmosphere.

When released in this way, DDT travels thousands of miles to colder areas where it returns to Earth and builds up in body fat of wildlife and humans. "DDT is such a potent chemical that as long as it is used anywhere in the world, nobody is safe," said Clifton Curtis, Director of WWF's Global Toxics Initiative.

The report calls for a global ban on the production and use of DDT no later than 2007, and until then for its use only as a "pesticide of last resort". Even though it is banned in 34 countries and severely restricted in 34 others, DDT is still endorsed by WHO for controlling malaria.

Contact: Conservation News Service, WWF International, Avenue du Mont Blanc, CH-1196 Gland, Switzerland.
Tel: (+41 22) 364 9550, Fax: (+41 22) 364 8307

Hennylito Tacio

TURTLE TRAP

Biologists are warning that turtles, once rich in countries in South East Asia, are fast disappearing because of their demand for sale as food and medicine in China.

Biologists say that collectors have made such a clean sweep of turtles in countries like Vietnam and Laos that it's impossible to find a single turtle even in ideal habitats in national parks and remote preserves. As such, scientists have been reduced to looking for turtles in China's markets as they say an entire fauna is being bought, sold and eaten into oblivion. "Southeast Asia is being vacuumed of its turtles for China's food markets," said Dr John Behler, chairman of the freshwater tortoise and turtle specialist group at the World Conversation Union (IUCN). "The China markets are a black hole for turtles."

Studies of actual export numbers corroborate the anecdotal evidence for large-scale export of these turtles. According to reports from TRAFFIC, the wildlife trade monitoring programme, more than 240 tonnes of turtles representing more than 200,000 individual turtles, were being sold in Vietnam for sale to Chinese markets in 1994. By 1996, two to four tonnes of turtles were being exported each day from Phnom Penh in Cambodia.

Source: *New York Times*, May 4, 1999.

Associates' News is compiled by **Maya Pastakia** to whom all contributions should be addressed.

Film

MISSION POSSIBLE

If the world's poor were to consume in the manner of the rich, they would have to increase their consumption of fish and energy by a factor of 7 and 17 respectively, and their acquisition of cars by over a hundred-fold. But the poor cannot hope to emulate the rich; if they did, we would need at least two additional planet Earths.

This is the starting point of *Mission Possible*, a 10-minute film which explores the issue of sustainable consumption, and which was premiered at the United Nations 1999 Commission for Sustainable Development meeting in New York. *Mission Possible* seeks to entertain, as well as enlighten, and uses a combination of graphics, drama, interviews and traditional documentary story-telling to get its point across.

The film begins with a sequence which shows the imbalance in our consumption patterns, between the North and South, between rich and poor, and the way in which even the most commonplace goods have an 'ecological footprint'. For example, to get the gold to make the ring on your finger over three tons of rock and earth had to be gouged out of the ground.

But is this just a rich world problem? No, suggests Dianne Dillon Ridgley of the Women and Environment Development Organisation. By dint of their rapidly growing populations, many of the world's poorer countries are consuming resources at levels which are also having a negative impact on the environment.

The first story in the film explores the way in which the 17,000 families who belong to the Mumbai Grahak Panchayat food distribution system in India's financial capital are consuming fewer resources by acting collectively, and are at the same time saving themselves money. By bypassing middlemen and buying in bulk, they save up to 20 per cent on the food bills. By using recyclable cloth bags, the system is helping to save up to half a million plastic bags a year, and bulk delivery helps cut down on transport.

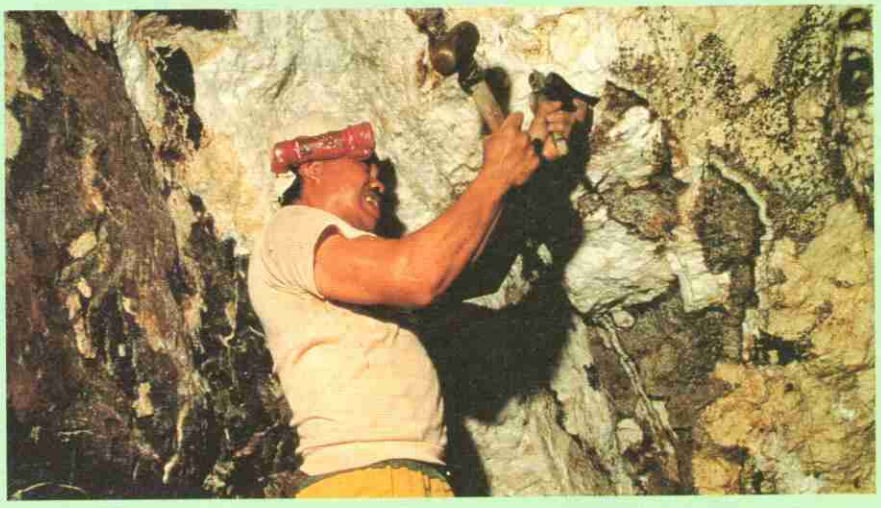
Community schemes like this one can make a real difference, but as Theo Anderson of Friends of the Earth, Ghana, says, we desperately need industry to take a lead in reducing the amount we – and they – consume. Claud Fussler of Dow Chemicals suggests that serious progress is already being made in many sectors of industry, and this leads us into the second story: how Interface carpet factory in Shelf, Yorkshire, has revolutionised the way in which it uses raw materials (see page 12). Besides using energy from renewable sources and kitting out its factories with the latest and most intelligent energy efficient devices, Interface recycles virtually all its waste, from discarded yarn to dust, and it encourages its employees to think about eco-efficiency by awarding annual bonuses for environmental achievement.

However, as long as government policies favour over-consumption, and as long as perverse subsidies encourage industry and individuals to behave in an environmentally irresponsible manner, there is little hope of us creating a world in which sustainable consumption becomes a reality. The film concludes with a brief survey of government initiatives – from as far afield as Thailand and Brazil – which are helping to make us more efficient and benign consumers.

Creating more sustainable patterns of consumption is possible – as the title suggests – but if this is to happen governments, businesses, communities and individuals will all have to play a part. ■

Charlie Pye-Smith

Mission Possible was made by North South Productions, in association with the International Institute for Environment and Development and the Norwegian Department of Environment.
VHS copies are available for £10 plus p&p from IIED, 3 Endsleigh Street, London WC1H 0DD, UK.
Tel: +44 (0)171 388 2117,
Fax: +44 (0)171 388 2826,
Email: mailbox@iied.org



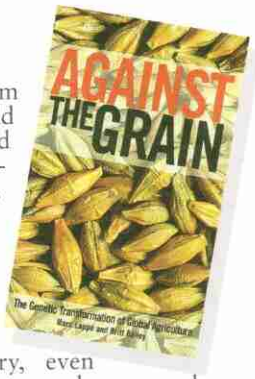
Mark Edwards/Still Pictures

Books

GENE DREAMS

AGAINST THE GRAIN: THE GENETIC TRANSFORMATION OF GLOBAL AGRICULTURE
Mark Lappé and Britt Bailey
Earthscan, London, 1999, £9.95

GENETIC ENGINEERING: DREAM OR NIGHTMARE? THE BRAVE NEW WORLD OF BAD SCIENCE AND BIG BUSINESS
Mae-Wan Ho
Gateway Books, Bath, England, 1998, £15.99



As the new millennium approaches, the world faces a massive food security and production challenge. The UN now projects the world population to reach 8.9 billion by 2050. Today, some 828 million people are hungry, even though we in theory produce enough food to feed everyone with an adequate diet. Most commentators agree that food production will have to increase, some say through modern high-input approaches, others point to the value of low-cost sustainable agriculture.

Recent years, though, have seen the emergence of a powerful new model – the use of genetically-modified crops and animals. GM farming appears to offer great promise – insecticidal crops no longer needing pesticides, salt- or drought-tolerant cereals, rapid-ripening and virus-resistant vegetables, 'pharmed' pharmaceuticals or neutraceuticals (crops grown for medical drugs or vitamins), low-fat animals, and many more. The first GM crops were grown on a small scale in 1994; last year they were cultivated on more than 20 million hectares.

It is this extraordinary pace of change that worries the authors of these two timely and excellent books. The fastest change is in technology development – there is no shortage of revolutionary ideas. But the slowest is in our understanding of the consequences and the emergence of any regulatory checks and balances.

Like all new technologies, there are side-effects associated with genetic engineering. Some of these represent fundamental ethical issues – should genes really be transferred across species that do not naturally breed? What kinds of unexpected traits will get transferred along with desired ones? Should human or animal embryos be used for laboratory experimentation? Increased knowledge about genes may lead to the emergence of different genetic classes, and of insurance companies only issuing life policies for people with or without certain genes.

Other problems are environmental, and centre on concerns over various forms of genetic pollution. GM crops could cross-pollinate with weedy relatives to produce superweeds. Insect pests

could rapidly develop resistance in the face of large-scale planting of GM crops with insecticidal properties. New virulent strains of viruses or bacteria could emerge.

In *Genetic Engineering: Dream or Nightmare*, Mae-Wan Ho addresses the fundamental genetics of the process. Is this like engineering, piling one brick upon another to build the tallest skyscraper? Or is it much more uncertain? This book sets the context for genetic science alongside the central involvement of giant multinational corporations. It warns that genetic engineering technologies will neither lead to a greener agriculture, nor to miracle cures for human diseases. Rather, it could unleash terrible unintended side-effects. This is certainly a 'Silent Spring' for the 1990s.

In *Against the Grain*, Mark Lappé and Britt Bailey critically assess the involvement of these large companies in the GM revolution. They point out that most of the innovations have occurred behind academic and corporate closed doors with little public involvement – resulting in a largely muted public response until earlier this year. The authors set out a wide range of health, food and environmental safety, and nutritional concerns, with careful analysis of the corporate response.

These two books are recommended reading for anyone concerned with the state of the world food system. If we can put people on the moon, we should be able to address the basic hunger needs of 800 million people. In the past, we have failed lamentably. Let us hope that we find new ways in the next century that not only succeed but do so in ways that do not result in greater harm to people and the natural environment.

Jules Pretty

Dr Jules Pretty is Director of the Centre for Environment and Society at the University of Essex, England.

LIFE AFTER CAPITALISM

THE POST-CORPORATE WORLD: LIFE AFTER CAPITALISM
David C. Korten
Kumarian Press and Berrett-Koehler Publishers Inc, Connecticut, USA, 1999, US$27.95

When Adam Smith, a moral philosopher, advocated the importance of letting the free market become the mechanism of economic activity, it was a different world. Strong families, strong rural communities, strong market towns, strong small cities and strong nations were in place. The political and economic systems were much more decentralised and international trading was like icing on the cake.

But now, at the end of the twentieth century, the idea of Adam Smith and the mechanism of the free market, has been hijacked by a few clever corporations. As a result, the free market has actually been destroyed and capitalism has taken over the world economy. No wonder that George Soros, one of the world's big financial players, has declared that the capitalist system poses danger to an open society. But David Korten goes a step further and believes that in the 1990s capitalism has already triumphed over democracy and the market economy. Under capitalism, democracy is for sale to the highest bidder and the market is controlled by global corporations, larger than most states.

This is a radical statement that laments the curse of Midas, a Greek mythological king, who was given power to turn anything he touched into gold. But when his touch turned his food, drink and even his beloved daughter to gold, he realised that his assumed blessing was in fact a curse. He had gold without limit, but no life, no food, no clothes – nothing. The modern world of money is facing a similar problem, the industrialised western world, in particular, is living under the dictatorship of the dollar, and democracy has become mirage.

The problem for Korten is not the market, it is the capitalism that is like a cancer growing, growing and growing. Consumerism, materialism and greed, guide the policies of the new-world order. But the tragedy is that what is in reality a cancer is seen as a desirable growth. And in the name of economic growth, growth of this cancer is promoted as progress. One billion dollars a day, seven billion dollars a week, 365 billion dollars a year, are spent on advertising. Economic growth has become an obsession. Consuming has become a patriotic duty. Capitalism has been successful in brain-washing everybody into thinking that money is the source of happiness. Capitalism is the religion of our time.

But David Korten, first through his book *When Corporations Rule the World* and now through this book, is speaking the truth and pointing out that the Emperor has no clothes. Capitalism is depleting the natural capital, the human capital, the social capital, and the institutional capital. Thus capitalism is bankrupting itself.

The answer is to move from such destructive capitalism to community-based, small-scale and fair market economy; where self-organisation, sharing, inclusiveness, co-operation, cultural diversity and respect for the environment become the guiding principles.

The Post-Corporate World doesn't just curse the darkness, it lights the candles. It proposes a positive and constructive programme for transformation, it inspires and encourages action to rebuild a true market economy.

Korten is the right man to expose capitalism and advocate a fair market. Having been through both Stanford and Harvard Universities, he knows the theory and practice of the corporate world. Also, having worked in a number of Third World countries he has first-hand experience of societies oppressed by inequity, exploitation and western domination. He has produced an authentic and challenging book.

Satish Kumar

Satish Kumar is Editor of *Resurgence* magazine.

WAKE UP CALL

CORPORATION NATION: HOW CORPORATIONS ARE TAKING OVER THE WORLD AND WHAT WE CAN DO ABOUT IT.
Charles Derber
St Martins Press, New York, US$24.95

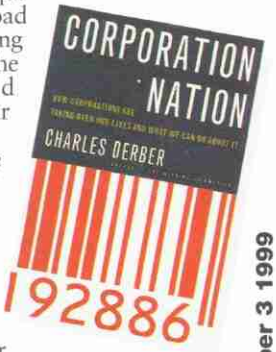
The sub-title of this lively book spells out its message, and gives a clue as to its intended audience. It is, one suspects, addressed as much to Professor Derber's students at Boston College and to young people elsewhere in America, as to the broader readership. He says the reaction of most of his students on being exposed to a critique of corporate power, is one of astonishment.

"Many say they cannot imagine Disney or Microsoft being too powerful. These corporations are, after all, the source of the lifestyle pleasures and magical technology that makes their lives fun and their studies easier."

In that respect, this book is a wake up call. An attempt to show just how huge and hugely influential the world's 44,000 transnational companies have become, controlling more than a third of the world's gross national product in 1995, compared to 17 per cent in 1960. The top 200 corporations form a global oligopoly, with a combined income of over $7 trillion; greater than the combined economy of 182 countries or the income of 4.5 billion people.

And of these, about 30 American giant global companies sit at the centre of the American economy, representing the pivotal power in the new world of corporate ascendancy "unmatched in their ambition, technological dynamism, and global reach." Together they embody not only the new ideas of freedom and global co-operation, but key elements of the new corporate order: "vast size, dominant market share, and a new ethic of minimal loyalty to employees, communities and the environment."

That theme is tellingly illustrated. And the new concept of corporate social responsibility is sharply analysed and found wanting. No amount of social responsibility, he argues, can make up for market laws. "Even the companies most fully dedicated to responsibility today – whether Levi Strauss, Reebok, or the Body Shop – continue, quietly, to pursue low-road strategies such as going abroad to contract the world's cheapest and most disposable labour force."



The answer, he argues, is to go for more fundamental reform: to build a new structure which links badly needed changes in corporate governance with changes in the larger economic and social order. He suggests the creation of public charters to help codify the social aims of industry, new forms of representation on company boards, broader global regulation, and the encouragement of a new "positive populism" which would involve labour, community institutions and environmental activists.

As usual in books of this sort, Professor Derber ends with a list of suggestions which readers can put into action. And, as always, they seem to be asking more than most readers will be willing to do. Nevertheless, this book is a wonderful stimulus to fresh thinking – not only for an American audience.

John Rowley

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